

JCD LIBRARY



STATE OF CALIFORNIA

The Resources Agency

Department of Water Resources

BULLETIN No. 179-71

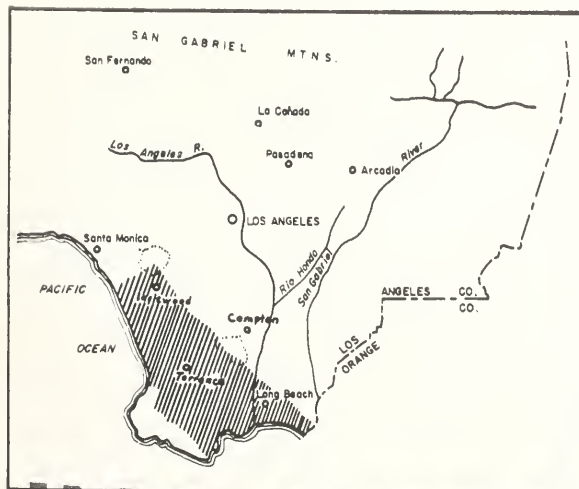
JUL 19 1972

WATERMASTER SERVICE

IN THE

WEST COAST BASIN

LOS ANGELES COUNTY



FOR PERIOD
JULY 1, 1970
THROUGH
JUNE 30, 1971

GUY & WOOD, JUN 1971

UCD LIBRARY

DECEMBER 1971

NORMAN B. LIVERMORE, JR.
Secretary for Resources
The Resources Agency

RONALD REAGAN
Governor
State of California

WILLIAM R. GIANELLI
Director
Department of Water Resources



STATE OF CALIFORNIA
The Resources Agency
Department of Water Resources

BULLETIN No. 179-71

WATERMASTER SERVICE
IN THE
WEST COAST BASIN
LOS ANGELES COUNTY

FOR PERIOD
OCTOBER 1, 1970 THROUGH SEPTEMBER 30, 1971

DECEMBER 1971

NORMAN B. LIVERMORE, JR.
Secretary for Resources
The Resources Agency

RONALD REAGAN
Governor
State of California

WILLIAM R. GIANELLI
Director
Department of Water Resources

ABSTRACT

Water supply and demand conditions in the West Coast Basin have not changed appreciably for several years. Ground water extractions have averaged about 60,000 acre-feet annually. As water requirements grow and more supplemental sources are developed, the trend is for an increase of imports; however, during the past water year, imports decreased, attributable to the increase in rainfall. In the 1970-71 water year, 9 parties overextracted a total of 87.34 acre-feet. Four overextracted by less than the 10 percent or 2 acre-foot limitation set by the Judgment. The five parties in violation purchased sufficient water from the 1971-72 Exchange Pool to offset their overextractions and meet their 1971-72 needs. As a result, the Watermaster recommends that no action be brought before the Court against the five parties.

Item	Water Year	
	1969-70	1970-71
Parties	81	80
Active pumps	48	48
Active nonparties	4	4
Adjudicated Right, in acre-feet	64,468.25	64,468.25
Watermaster expenses, total	\$34,809.93	\$42,274.80
Watermaster expenses per acre-foot pumped	\$.56	\$.66
Rainfall, in inches	6.47	10.88
Injection at barrier project, in acre-feet	29,461	32,065
Extractions, in acre-feet	62,447	60,923.93
Imports, in acre-feet	257,012	251,886.98
Exports, in acre-feet	- 13,700	- 12,846.46
TOTAL WATER USE, in acre-feet	305,749	299,964.45

State of California The Resources Agency DEPARTMENT OF WATER RESOURCES

Ronald Reagan, Governor
Norman B. Livermore, Jr., Secretary for Resources
William R. Gianelli, Director, Department of Water Resources
John R. Teerink, Deputy Director

SOUTHERN DISTRICT

James J. Doody District Engineer and Watermaster
Mitchell L. Gould Chief, Operations Branch and Deputy Watermaster

Watermaster service in this area was conducted and report prepared under the direction of

Clyde B. Arnold Chief, Contracts Administration Section

by

Carlos Madrid Deputy Watermaster

assisted by

Gabriel V. Valenzuela Water Resources Engineering Associate
Cesar M. Garma Assistant Civil Engineer
Morton B. Graham Water Resources Technician II
Joseph F. Scott Water Resources Technician II
Raymond D. Woo Water Resources Technician II
Henry B. Whitney Water Resources Technician I
Allan M. McDonagh Water Resources Technician I
John A. Stanley Water Resources Technician I

FOREWORD

The Department of Water Resources, as Watermaster for the West Coast Basin, submits this annual report as a comprehensive review of water supply conditions in the Basin during the 1970-71 water year. The report was prepared for the Superior Court of the County of Los Angeles, and for the parties to the West Coast Basin Judgment, whose provisions authorize its publication.

The West Coast Basin is administered by the Department as a watermaster service area in accordance with Part 4, Division 2, of the California Water Code. The Basin has been operating for several years under a well-defined management plan that limits and monitors ground water extractions.

This report contains information on ground water extractions, use of imported water, recharge operations, the administration of the Exchange Water Pool, and a financial report on watermaster service during the 1970-71 water year.



James J. Doody
District Engineer
Southern District
and Watermaster
Reg. C. E. No. 6500

CONTENTS

	<u>Page</u>
ABSTRACT	2
ORGANIZATION	2
FOREWORD	3
I. THE WEST COAST BASIN	7
History of Water Resources Development	7
Watermaster Service	8
II. WATER SUPPLY	9
Precipitation	9
Ground Water Recharge	9
Sea-Water Intrusion Barrier Projects	10
Water Quality	11
Construction Projects Affecting Water Supply	11
In Lieu Replenishment	14
Ground Water Levels	14
III. WATER USE	23
Ground Water Extractions	25
Extractions by Nonparties and Parties with No Adjudicated Rights	27
Imported Supplies	27
Exported Supplies	32
IV. ADMINISTRATION OF THE JUDGMENT	33
Exchange Pool	33
Transfers of Adjudicated Rights	34
Overextractions	36
V. ADMINISTRATIVE COSTS	37
APPENDIXES	
A Adjudicated Rights of West Coast Basin Parties, September 1971 and Copies of Documents Sub- stantiating Transfers of Adjudicated Rights	41
B Ground Water Extractions	69

Figures

		<u>Page</u>
1	West Coast Basin	6
2	Precipitation Stations and Barrier Projects	9
3	West Coast Basin Barrier Project	10
4	System for Water Well Identification	15
5	Fluctuations of Water Level Elevations at Wells in the Upper Pleistocene and Recent Aquifers	19
6	Fluctuations of Water Level Elevations at Wells in the Silverado Aquifer	20
7	Fluctuations of Water Level Elevations at Wells in the Merged Phases of the Silverado and Lynwood Aquifers . . .	21
8	Monthly Water Demand and Average Rainfall	23
9	Historical Ground Water Extractions and Total Water Use by Parties	23

Tables

1	Spreading Operations	9
2	Barrier Operations	10
3	In Lieu Replenishment Program	14
4	Summary of Water Accounts of Parties, 1970-71 Water Year. .	24
5	Gross Water Use	25
6	Extractions by Nonparties and Parties with zero Adjudicated Rights.	27
7	Imported Water	32
8	Exchange Pool Offers	33
9	Exchange Pool Requests	33
10	Transfers of Adjudicated Rights	35
11	Overextractions	36
12	Approved Budget for 1970-71	37
13	Apportionment of Parties' Shares, 1970-71 Budget	38
14	1970-71 Income and Expenditures	40

Plates

1	Location and Status of Water Wells.	12-13
2	Lines of Equal Water Level Elevations at Wells in the Silverado Aquifer, Spring 1971	16
3	Lines of Equal Water Level Elevations at Wells in the Silverado Aquifer, Fall 1971	17
4	Lines of Equal Change in Water Level Elevation at Wells in the Silverado Aquifer, Fall 1970 to Fall 1971	18
5	Water Service Areas of Municipal, Mutual and Public Utility Water Service Agencies, September 1971	28-29
6	Water Service Areas of Individual Producers, September 1971	30-31

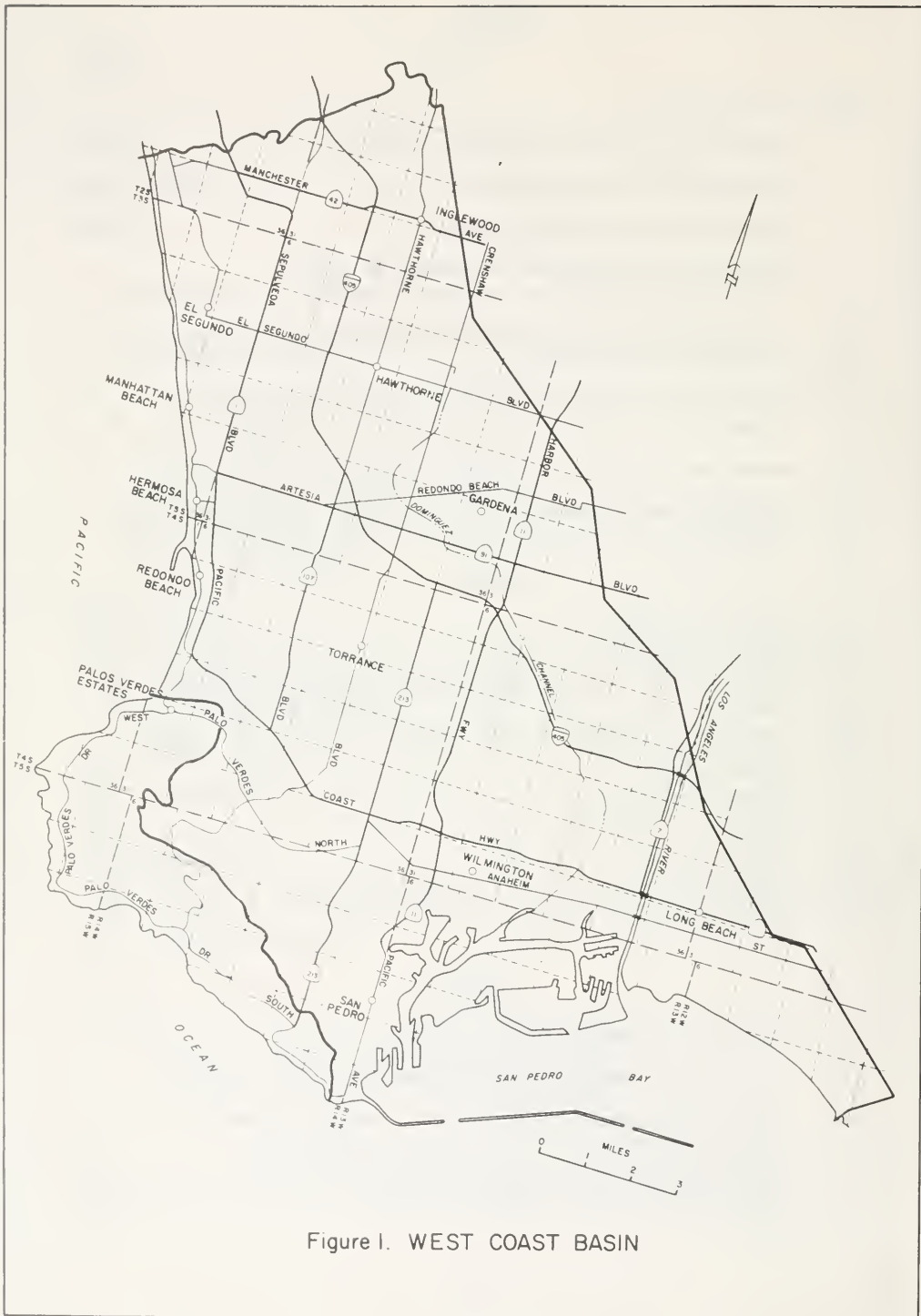


Figure I. WEST COAST BASIN

I. THE WEST COAST BASIN

The West Coast Basin is a relatively small ground water basin underlying the southwestern part of the Los Angeles Coastal Plain. It is bounded on the south and west by the Pacific Ocean, on the north by the Ballona Escarpment, and on the east by the Newport-Inglewood Uplift. Most of the Basin's 160 square miles includes 19 incorporated cities. A substantial portion of the water needed by these communities can be pumped directly from the ground water in storage beneath them.

Some 20 years ago, when an incursion of sea water caused by declining water levels threatened the quality of the ground water supply, timely legal action was begun to halt the overdraft and prevent serious damage to the Basin. Today ground water use in the Basin is monitored by a court-appointed Watermaster whose primary job is to control ground water use and report all significant water-related events in the Basin to the Superior Court in Los Angeles County and parties to the West Coast Basin Judgment. The Basin has been operated under the management of a Watermaster for ten years.

History of Water Resources Development

The absence of adequate surface water supplies in the West Coast Basin forced the early development of ground water sources. In 1870, the communities of Inglewood and Long Beach had tapped the artesian wells and springs east of the Newport-Inglewood Uplift. When the artesian wells ceased to flow, water users were forced to drill small wells for water. By 1904, about 100 wells were producing 10,000 acre-feet of water annually.

The techniques used to develop ground water were advanced dramatically in 1909 with the advent of the deep well turbine pump. Its tremendous adaptability and superior operating characteristics gave countless water users access to efficient water wells. Dependable sources of water attracted industry and agriculture and in time the demand for water exceeded the rate at which the Basin was being replenished naturally. The resulting overdraft was clearly shown by falling ground water levels and expanding areas of sea water intrusion. Water levels throughout the Basin dropped below sea level in the 1920's. Water wells along Santa Monica Bay had been abandoned by 1920 because the water was too salty to use. By 1932 the entire coastal reach of the Basin had been invaded by sea water.

Ground water deterioration continued until in 1945 the California Water Service Company, the City of Torrance, and the Palos Verdes Water Company filed suit in Superior Court, Los Angeles County. Their objectives: to quiet title to the ground water rights of each pumper and to establish control over ground water extractions from the Basin. Other organizations moved to support the litigations and the West Basin Water Association was formed in 1946. A plan to manage the Basin's water resources was set up to:

- 1) Provide a supplemental water supply for major producers
- 2) Limit ground water extractions
- 3) Create an exchange water pool to provide pumping rights for water users not having access to supplemental water.

The first of these steps was realized in 1947 when the West Basin Municipal Water District was formed to distribute water from the Colorado River. The District was annexed to the Metropolitan Water District of Southern California in 1948, and Colorado River water began flowing into the West Coast Basin.

The second and third steps began when the Court held its preliminary hearings in 1946 to define the ground water problem and outline areas in which more information was needed. The Court then asked the California Division of Water Resources (now the Department of Water Resources) to define the boundaries and determine the geologic and hydrologic characteristics of the West Coast Basin. Division personnel spent six years analyzing the physical properties of the Basin. The major water producers also retained an "Engineering Advisory Committee" to aid the investigation.

As more information became available, the full magnitude of the problem became evident. In 1949, an amended complaint added 340 parties to the suit. A "Report of Referee" was filed with the Court on September 15, 1952.

Several years passed before water users became sufficiently alarmed by ground water conditions to draft an Interim Agreement that reduced ground water extractions until a final Judgment was approved. The Court approved the Agreement and appointed the Division of Water Resources as Watermaster to administer it.

A "Final Report of Referee" filed on June 8, 1961, included data on ground water conditions between 1950 and 1956. The Report provided the information needed to draft the final Judgment. On August 8, 1961, after 16 years of litigation, the Court rescinded the Interim Agreement and signed the West Coast Basin Judgment. The new Judgment retained the (now) Department of Water Resources as Watermaster.

A second suit, often called the American Plant Growers Case, was filed in October 31, 1956, to bring several new pumpers not named in the original suit under the orders of the Judgment. As a result, 76 additional parties were ultimately placed under the jurisdiction of the Court on March 24, 1966.

Watermaster Service

Watermaster service areas are created by the Department of Water Resources either at the request of water users or by order of the Superior Court. Cost of the service is shared equally by the State and the participating water users.

Once a month every ground water pumper reports his ground water extractions to the Watermaster and each water right account is revised by computation of the amount pumped during the previous month, the total amount pumped thus far during the current water year, and the amount that can legally be pumped during the remainder of the water year. Each pumper receives an updated copy of his account every month.

Accurate measurement of ground water extractions is absolutely necessary to the success of the Basin's management plan. Therefore, the field staff calibrates the water meter on every active water well at least once every two years. Every available means, including system efficiency tests, are used to confirm water meter test results. Inaccurate meters must be repaired in 30 days. Follow-up tests on repaired meters and initial tests on new wells are scheduled whenever necessary.

Once each fall and once each spring of each water year the depth to the static ground water level is measured in about 350 water wells in the Basin. The measurements are used to prepare "fall" and "spring" contour maps of ground water surface and "fall-to-fall" maps of areas of equal elevation change over a one-year period.

II. WATER SUPPLY

Water from several sources serves Southern California -- the Colorado and Owens Rivers, mountain runoff, ground water, reclaimed waste water, and water from coastal desalination plants. Additional water will soon be delivered by the California Aqueduct.

Precipitation

Typically sparse rainfall has little influence on the ground water supply of the West Coast Basin. Impermeable material lying between the surface and the producing aquifers prevents almost all rainfall from reaching zones from which it could be pumped to the surface. Longtime average precipitation is 12.73 inches per year. Average for the 1970-71 water year was about 85% of that amount. Locations of precipitation stations used to measure rainfall in the basin are shown in Figure 2.

Ground Water Recharge

Natural replenishment of the basin's ground water supply is limited to underflow from the Central Basin, which bounds the West Coast Basin on the east.

Table 1. SPREADING OPERATIONS^{a/}

Water Source	Quantity in acre-feet	
	1969-70 Water Year	1970-71 Water Year
Metropolitan Water District water purchased with Central and West Basin water Replenishment District funds	28,789	25,420
MWD water purchased with LACFCD Zone 1 funds	26,651	46,714
Local runoff	53,257 ^{b/}	41,781 ^{c/}
Reclaimed water	17,156	19,495
Makeup water from Upper San Gabriel Basin	<u>0</u>	<u>0</u>
TOTALS	125,853	133,410

a/ Information provided by the Los Angeles County Flood Control District

b/ Corrected figure

c/ Estimated figure



Figure 2 PRECIPITATION STATIONS AND BARRIER PROJECTS

Water spread in the Central Basin percolates into aquifers there and eventually crosses the Newport-Inglewood Uplift to supplement the ground water supply in the Coastal basin. Although the water is not directly applied to the West Coast Basin, this process returns large quantities of water to the ground and substantially increases natural subsurface flow from the Central to the West Coast Basin. Effectiveness of the process is limited to the space available in one basin for spreading facilities and the other basin's

capability to accept the water. The entire spreading operation is summarized in Table 1.

Sea-Water Intrusion Barrier Projects

Sea-water intrusion in the West Coast Basin barrier project has been effectively halted by a line of 93 injection wells that parallel the coast between the Los Angeles International Airport and the Palos Verdes Hills. The Los Angeles County Flood Control District, which operates the project, injects filtered Colorado River water into the barrier to create a pressure ridge that impedes the inland movement of a saltwater front and maintains protective ground water elevations in the Silverado and "200-foot sand" aquifers. Water for the barrier is purchased by the Central and West Basin Replenishment District and delivered by the Metropolitan Water District. Scope of the project is shown in Figure 3, which illustrates the extent to which sea water has

Table 2. BARRIER OPERATION:^{a/}

Operation	West Coast Basin	Dominez Gap
Quantity injected, in acre-feet	29,867	2,198
Average injection rate, cubic feet per second	41.5	4.5
Number of injection wells	93	29
Number of observation wells	205	197
Number of injection wells to be added during 1971-72 water year	0	0
Number of observation wells to be added during 1971-72	0	0

^{a/} Information provided by the Los Angeles County Flood Control District.

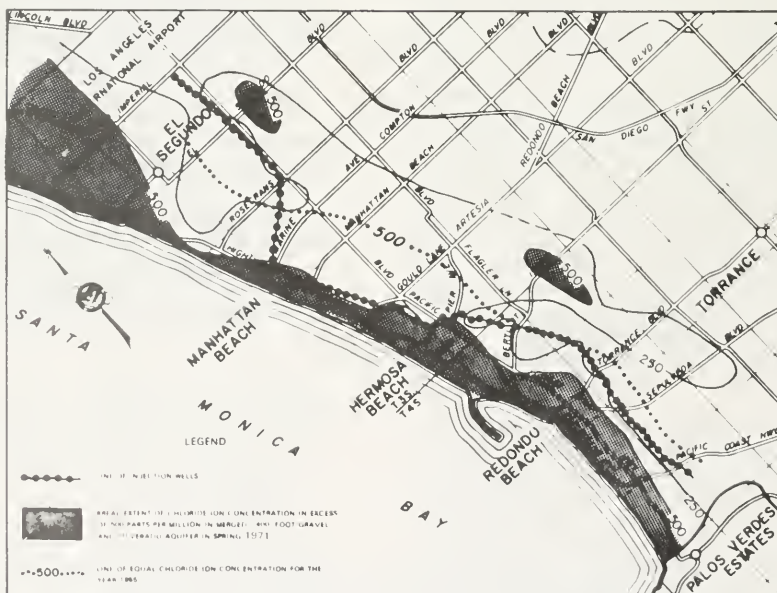


Figure 3 WEST COAST BASIN BARRIER PROJECT

intruded into the merged phases of the Silverado aquifer.

A second barrier to sea-water intrusion was built by the LACFCD along San Pedro Bay. This project, called the Dominguez Gap barrier project, started operations during February 1971 and operates in a manner similar to the West Coast Basin barrier project. The project has 29 injection wells located as shown in Figure 2. Table 2 gives additional data on the barrier projects.

Water Quality

Providing good quality ground water for the West Coast Basin depends to a great extent on the use of correct water well construction methods. Some aquifers in the Basin are hydraulically connected to the ocean and occasionally sea water moves from them into adjacent fresh-water aquifers. If a well being drilled without proper casing techniques passes through both saline and fresh water aquifers, the sea water can move from the polluted aquifer to the unpolluted one.

To prevent such occurrences, the Department of Water Resources conducted an intensive investigation that culminated in the publication of recommended standards for water well construction and destruction.^{1/} Adoption hearings on these standards were held in 1969 by the Los Angeles Regional Water Quality Control Board, and it now reports that all local agencies and municipalities in the West Coast Basin have adopted them.

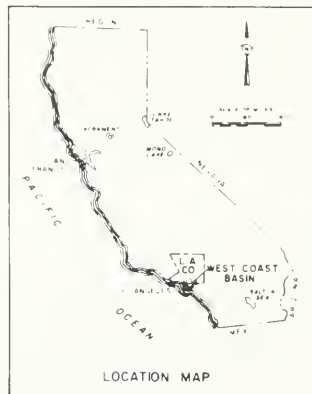
^{1/} DWR Bulletin No. 74, "Water Well Standards; State of California," February 1968; and DWR Bulletin No. 107, "Recommended Well Construction and Sealing Standards for Protection of Ground Water Quality in West Coast Basin Los Angeles County," August 1962.

Solid waste is another factor that can affect ground water quality in the basin. A shortage of disposal sites for this material has become increasingly critical. Abandoned gravel pits are particularly sought after. One of these is the Chandler Pits just south of the Pacific Coast Highway. Several applications for permission to use this site for disposal of solid waste have been refused because of the potential degradation of ground water. The Central and West Basin Water Replenishment District, the West Basin Water Association, and others have vigorously opposed these applications. One applicant had asked to deposit decomposable solid waste in the pits. In December 1968, the Regional Board reaffirmed its restriction to deposition of inert material. The matter was appealed, but during the past water year the appeal was dropped.

Construction Projects Affecting Water Supply

Three major construction projects will significantly affect the water supply of the West Coast Basin: The State Water Project, the Metropolitan Water District's distribution system, and the second barrel of the Owens River-Mono Basin Aqueduct of the City of Los Angeles.

About 99 percent of the State Water Project conveyance facilities are complete. The MWD has completed construction of the Second Lower Feeder between Alameda Street, easterly of the City of Carson, and the Palos Verdes Reservoir. The Sepulveda Feeder, which will also carry water from the State Water Project to the West Coast Basin is currently under construction. The portion from the treatment plant to the Sepulveda tunnel and the tunnel are complete. The remaining portion which ties in to the Second Lower Feeder at 220th Street in Torrance is approximately 65 percent complete, with completion



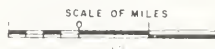
LEGEND

- BASIN BOUNDARY
- ACTIVE WELLS OF PARTIES
- INACTIVE WELLS OF PARTIES
- ACTIVE WELLS OF NONPARTIES
- INACTIVE WELLS ON WHICH CONTINUOUS RECORDERS MEASURING WATER LEVEL FLUCTUATIONS ARE MAINTAINED BY PARTIES
- INACTIVE WELLS ON WHICH CONTINUOUS RECORDERS MEASURING WATER LEVEL FLUCTUATIONS ARE MAINTAINED BY D & R
- ◆ LOS ANGELES COUNTY FLOOD CONTROL DISTRICT OBSERVATION WELLS
- LINE OF INJECTION WELLS
- PRECIPITATION STATION

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT

WEST COAST BASIN WATERMASTER SERVICE

LOCATION AND STATUS
OF
WATER WELLS



scheduled for December 1972. The City of Los Angeles completed construction of the second barrel of its Owens River-Mono Basin Aqueduct in June 1970. The barrel ends in the San Fernando Valley but some of the water crosses the Santa Monica Mountains and moves south into the West Coast Basin.

Another project of interest to West Coast Basin water users is the Los Angeles County Joint Sanitation District's plan to reclaim waste water by spreading it in the forebay areas of the Central Basin. Although none of the proposed facilities will be located in the coastal basin, that basin may benefit later, possibly through use of the reclaimed water to operate the area's two sea-water barrier projects.

In Lieu Replenishment

During the 1965-66 water year, the Central and West Basin Water Replenishment District began a program of in lieu replenishment. By contract with the Replenishment District, any producer with access to supplemental water may use it instead of water pumped from the ground. The program may be used to:

- 1) Alter pumping patterns within a ground water basin,
- 2) Replenish areas of low transmissibility where conventional recharge techniques are ineffective,
- 3) Heighten the effect of injecting water to form a sea-water barrier by reducing nearby extractions,
- 4) Reduce the amount of replenishment water purchased by the District, and
- 5) Reduce the annual ground water extraction from the West Coast Basin.

When the District first announced its intention to begin in lieu replenishment, several West Coast Basin producers expressed an interest. However, the only producer to participate so far has been the California Water Service Company. The in lieu replenishment program is an effective basin management tool which, if expanded,

could obtain significant beneficial results. The Central and West Basin Water Replenishment District, 7439 East Florence Avenue, Downey, California 90240, is a source of additional information.

Table 3. IN LIEU REPLENISHMENT PROGRAM^{a/}

Water Year	Amount contracted in acre-feet	Contract price, dollars per acre-foot	Total Payment
1965-66	744.59	\$ 12.33	\$ 9,180.79
1966-67	850.57	14.14	12,027.06
1967-68	850.00	13.36	11,356.00
1968-69	850.00	14.25	12,112.50
1969-70	899.88	15.32	13,786.16
1970-71	881.30	17.83	15,713.58

^{a/} Information provided by the Central and West Basin Water Replenishment District.

Ground Water Levels

The volume of ground water stored in the West Coast Basin is constantly changed by variations in subsurface inflow and outflow, artificial recharge, extractions, and in precipitation to a lesser degree. The Silverado Aquifer, underlying most of the West Coast Basin, is the most productive aquifer in the basin. Varying from 100 to 500 feet in thickness, it yields about 80 to 90 percent of the ground water extracted annually.

Measurements of ground water surface elevations, (Plates 2 and 3), and the summarization of changes in water level elevations (Plate 4), demonstrate an increase in storage along the eastern part of the basin and a decrease in storage in the coastal area. The declining storage may have been caused by a reduced rate of recharge along the barrier project. The hydrographs of selected wells representative of the various aquifers underlying the basin (Figures 5, 6, 7) show that the water surface has stabilized. In some cases, it has risen slightly, due to recharge operations and changing extraction patterns.

State well numbers that identify each water well in the West Coast Basin are derived from a system based on the U. S. Public Land Survey. Each number consists of township and range designation, a section number, a letter representing the 40-acre tract in which the well is situated, a sequence number indicating the chronological order in which the well number was assigned, and a letter repre-

sending the base and meridian. The last letter is frequently omitted from well numbers in a single area because all wells there share a single base and meridian. Well numbers are assigned by the Watermaster.

The components of well No. 4S/14W-13D06S, for example, are identified in the following breakdown:

Township	Range	Section	Tract	Sequence number	Base and meridian
<u>4S</u>	<u>14W</u>	<u>13</u>	<u>D</u>	<u>06</u>	<u>S</u>

The derivation of the components is illustrated below.

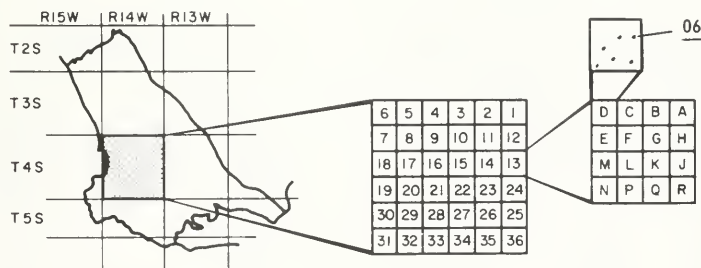
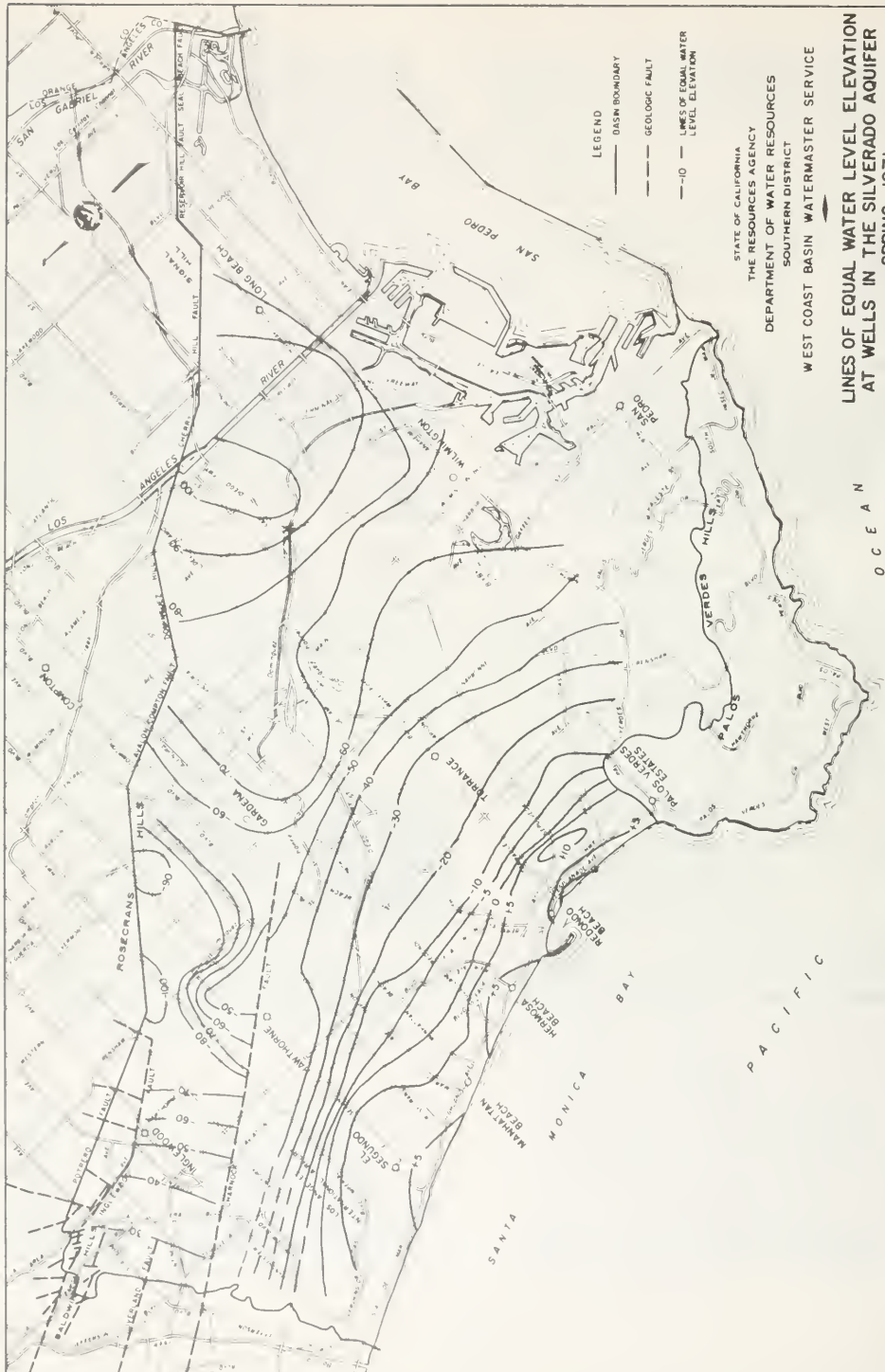
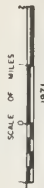


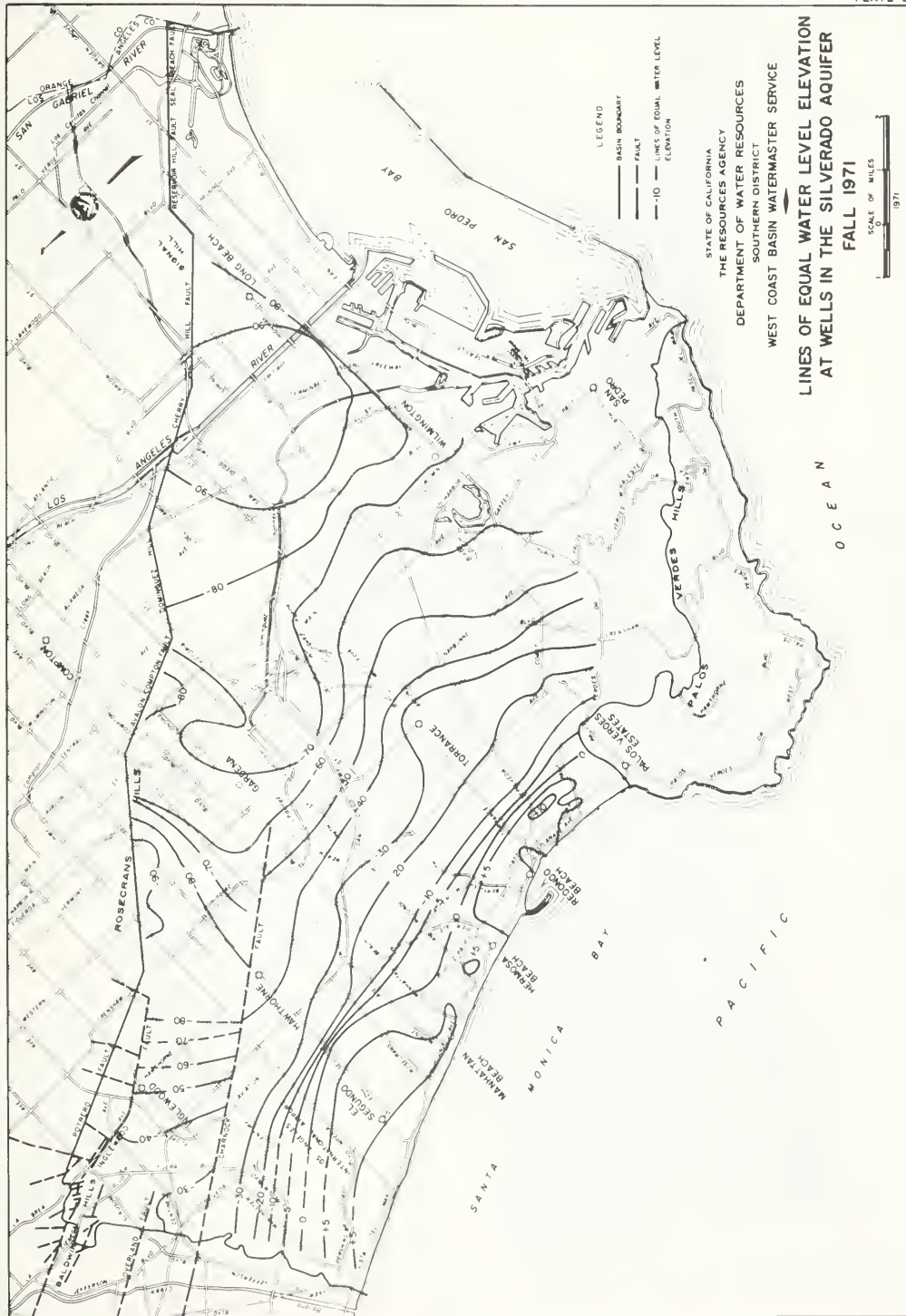
Figure 4. SYSTEM FOR WATER WELL IDENTIFICATION

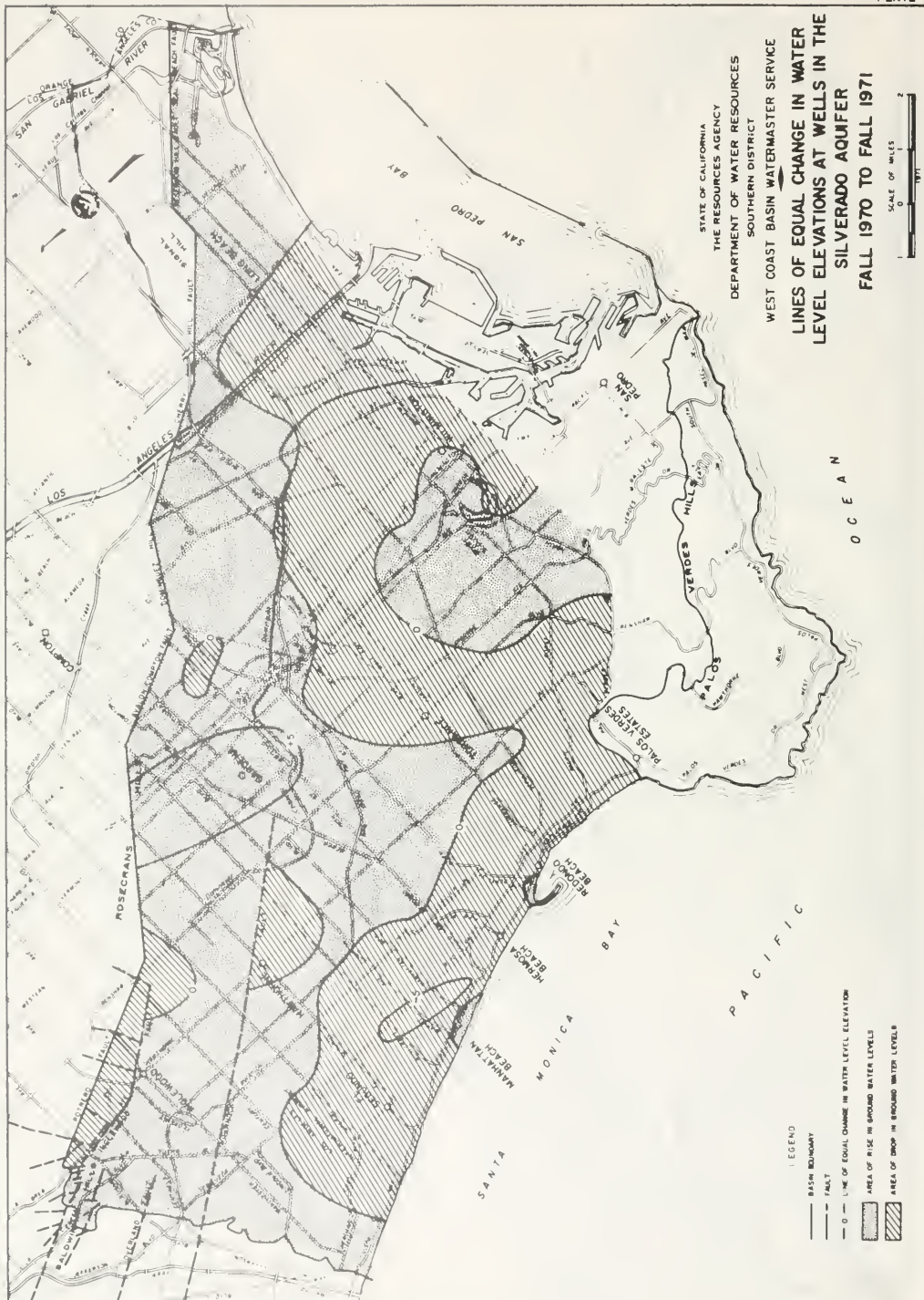


STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT
WEST COAST BASIN WATERMASTER SERVICE

LINE OF EQUAL WATER LEVEL ELEVATION
AT WELLS IN THE SILVERADO AQUIFER
SPRING 1971







DATUM
 USGS
 FEET
 IN
 WELLS
 AT
 ELEVATION
 WATER LEVEL

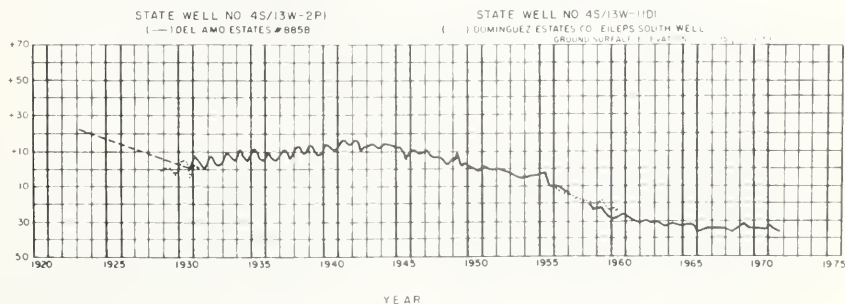
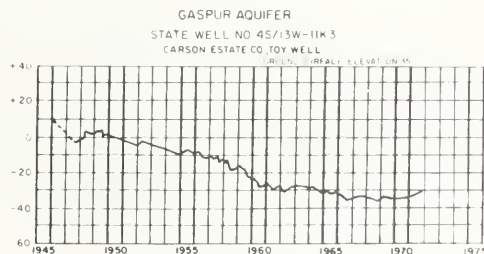
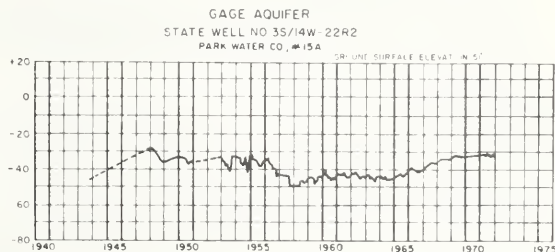
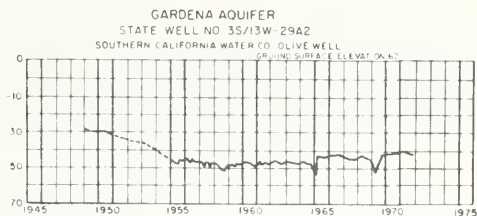


Figure 5.— FLUCTUATIONS OF WATER LEVEL ELEVATIONS AT WELLS IN THE UPPER PLEISTOCENE AND RECENT AQUIFERS

WATER LEVEL ELEVATION AT WELLS IN FEET - USGS DATUM

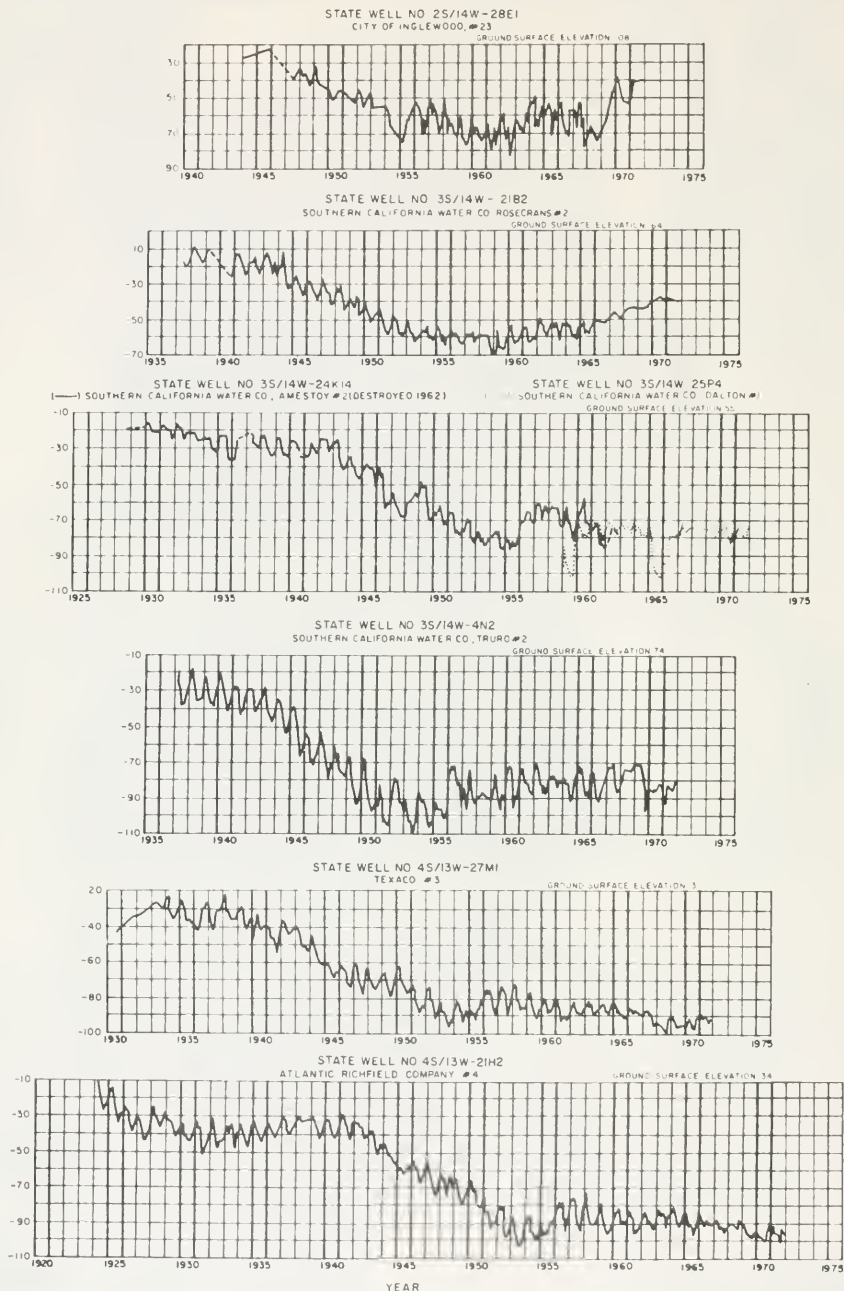
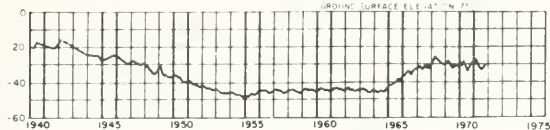


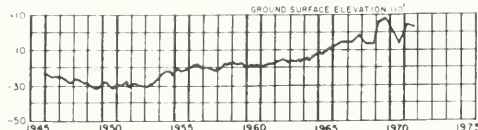
Figure 6.- FLUCTUATIONS OF WATER LEVEL ELEVATIONS AT WELLS IN THE SILVERADO AQUIFER

WATER LEVEL ELEVATION AT WELLS IN FEET - USGS DATUM

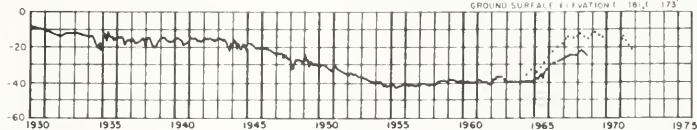
MERGED GARDENA, LYWOOD AND SILVERADO AQUIFERS
STATE WELL NO 45/14W-3L3
MOBIL OIL CO #3



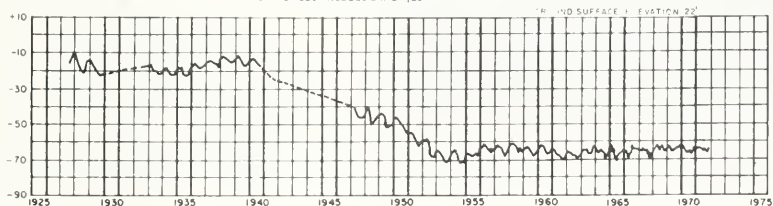
MERGED LYWOOD AND SILVERADO AQUIFERS
STATE WELL NO 35/15W-12B1
CITY OF EL SEGUNDO #10



STATE WELL NO 45/14W-22D1 STATE WELL NO 45/14W-21L2
(—) STANDARD OIL CO, MARBLE FEE #1 (---) TORRANCE UNIFIED SCHOOL DISTRICT WELL



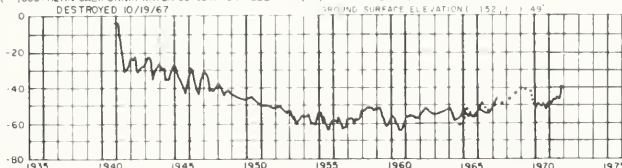
STATE WELL NO 45/13W-31E4
CITY OF LOS ANGELES DWP, LOMITA #4



LYWOOD AQUIFER

STATE WELL NO 35/14W-23L1
(—) SOUTHERN CALIFORNIA WATER CO COMPTON WELL
DESTROYED 10/19/67

STATE WELL NO 35/14W-12K1
(---) PARK WATER CO #13C



STATE WELL NO 45/13W-30K1
CITY OF LOS ANGELES DWP, LOMITA #7

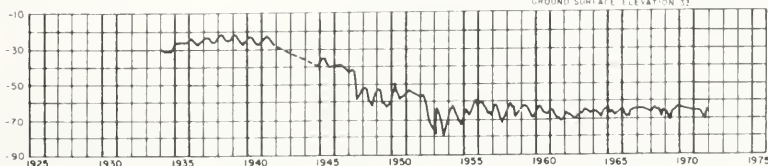


Figure 7.— FLUCTUATIONS OF WATER LEVEL ELEVATIONS AT WELLS
IN THE MERGED PHASES OF SILVERADO AND LYWOOD AQUIFERS

III. WATER USE

In the 1970-71 water year, the West Coast Basin provided approximately 313,000 acre-feet of water, 6000 acre-feet less than it provided in the 1969-70 water year. The basin contained 848 existing wells -- 119 active, 145 inactive, 122 injection, and 462 observation. Seven were drilled and 12 were destroyed.

Since 1955, the water demands of a rapidly increasing population have exceeded the 60,000 acre-foot total ground water extraction permitted by the Judgment, causing imported water to become the largest component of the basin's water supply.

Figure 8 depicts the monthly relationship among rainfall, ground water extractions, and imported supplies. Figure 9 illustrates annual ground water extractions and total water use from 1933 to the present. Much of the increase since the 1963-64 water year may be attributed to the West Coast Basin barrier project. Water demand for that purpose has leveled off since completion of the project in 1968.

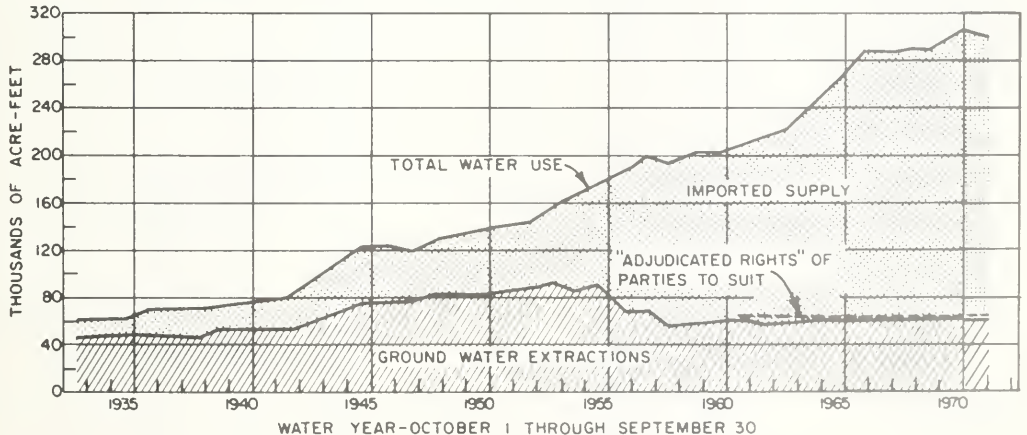
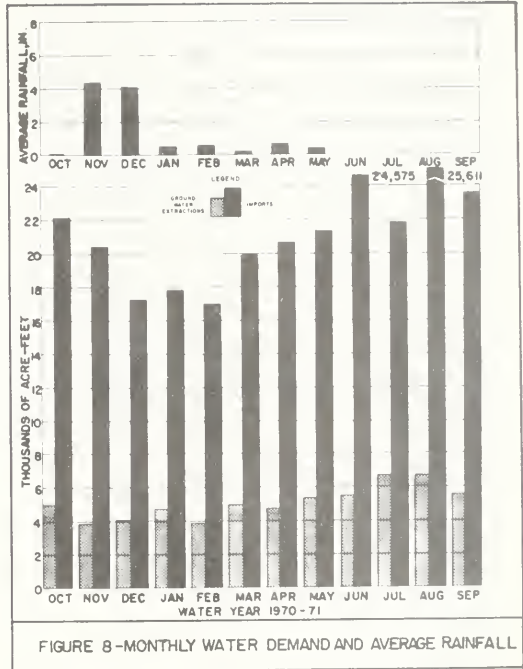


Table 4. SUMMARY OF WATER ACCOUNTS OF PARTIES, 1970-71 WATER YEARS, in acre-feet

Party	(1) Adjudicated Right	(2) Allowable carryover from 1969-70	(3) Exchange water purchased (+) or sold (-)	(4) Net g/lease ^a	(5) Allowable extractions (1)+(2)+(3)+(4)+(5)	(6) Amount pumped	(7) Balance (5)-(6)= ^b	(8) Allowable carryover into 1971-72
ABC Nursery, Incorporated	22.10	+ 4.44	+ 9.00		26.46	35.67	- 9.01	- 9.01
American Plant Growers, Incorporated	10.00	+ 3.42		+ 20.00	26.58	29.89	- 3.31	- 3.31
Aashi Pancy Kol, Incorporated	2.00	+ 2.00		+ 12.10	16.10	0.00	+ 16.10	+ 2.00
Atlantic-Richfield Company	4,288.00	+ 288.72		+6,900.00	11,616.72	11,331.33	+ 285.39	+ 285.39
Bellman, Rosemary	7.00	0.00	+ 7.00		0.00	0.00	0.00	0.00
Boise Cascade Building Company	16.92	+ 2.00			18.92	0.00	+ 18.92	+ 2.00
California Water Service Company	3,700.00	0.00		- 20.00	3,580.00	2,189.70	+ 1,390.30	+ 305.10
Carson-Madison Company	104.00	0.00		- 104.00	0.00	0.00	0.00	0.00
Chandler's Palos Verdes Sand and Gravel Corporation	294.20	+ 29.42	+ 146.00		469.62	339.87	+ 129.75	+ 29.42
Coast Forest Products	3.40	+ 2.00			5.40	0.00	+ 5.40	+ 2.00
Columbia Broadcasting System, Incorporated	9.50	0.00		- 9.50	0.00	0.00	0.00	0.00
Curtis, Owen W.	0.36	+ 0.72			1.08	0.00	+ 1.08	+ 1.08
DeLaney, Golden, Estate of	4.10	0.00			6.10	0.00	+ 6.10	+ 2.00
Deser Enterprises	0.00	+ 5.00 ^c	+ 2.00		7.00	0.00	+ 6.89	+ 1.92 ^d
Dominquez Water Corporation	10,150.65	- 615.09		- 558.39	8,977.17	8,801.20	+ 175.97	+ 175.97
El Segundo, City of	953.00	0.00	- 900.00		53.00	0.00	+ 53.00	+ 5.30
Egelands, Jane	12.10	0.00	- 12.10		0.00	0.00	0.00	0.00
Eichemdy, Caroline, Estate of	8.40	0.00	- 8.20		0.00	0.00	0.00	0.00
Fletcher Oil and Refining Company	86.90	+ 8.63			94.93	76.32	+ 18.61	+ 8.63
Fletcher, Robert G., Daniel S. and Wilfred D.	3.70	0.00			3.70	0.00	+ 3.70	+ 2.00
Fujimoto, Samuel R. & Raymond S.	20.00	+ 2.00			22.00	7.26	+ 14.74	+ 2.00
Gillingham, Florence R., et al.	2.40	0.00	+ 2.40		0.00	0.00	0.00	0.00
Gonzalez, Felipe	34.70	0.00		- 34.30	0.00	0.00	0.00	0.00
Grant, John, Estate of	39.00	+ 5.90			64.90	0.00	+ 64.90	+ 5.90
Harris Tube, Incorporated	0.70	+ 1.40			2.10	0.00	+ 2.10	+ 2.00
Hawthorne, City of	1,882.00	+ 12.46			1,894.46	1,894.46	+ 7.86	+ 7.86
Hillside Memorial Park	29.20	- 18.09	+ 37.00		48.11	31.73	+ 12.08	+ 1.80 ^e
Hollywood Turf Club	282.00	+ 10.68			292.68	266.99	+ 25.71	+ 25.71
Industrial Chemical Division, Allied Chemical Corporation	255.00	+ 25.50			280.50	193.11	+ 87.40	+ 25.50
Inglewood, City of	4,385.17	+ 69.00			4,454.17	4,342.54 ^f	+ 111.63	+ 111.63
Inose, Kenichi	5.40	+ 5.92	+ 14.00	+ 2.20	15.68	18.00	- 2.38	- 2.38
Izumiaki, Aki	0.00	+ 16.00	+ 40.00		29.94	29.37	+ 5.53	+ 5.53
Johns-Manville Products Corporation	881.00	- 19.38			861.62	858.89	+ 2.73	+ 2.73
Joushin Torrance Ranch	3.33	+ 2.00			5.33	0.00	+ 5.33	+ 2.00
Lakerlof, Stanley P.	3.50	+ 2.00		- 5.50	0.00	0.00	0.00	0.00
Lerma, Alfred	0.70	+ 1.40			2.10	0.00	+ 2.10	+ 2.00
Leuzinger, James L.	1.40	+ 2.00			3.40	0.00	+ 3.40	+ 2.00
Long Beach, City of	0.70	+ 1.40			2.10	0.00	+ 2.10	+ 2.00
Lopes, Frank	3.70	0.00			5.70	0.00	+ 5.70	+ 2.00
Los Angeles, City of	1,503.00	+ 149.73	+ 1,000.00		2,652.73	2,548.21	+ 104.52	+ 104.52
Los Angeles County-Alondra Park	67.70	0.00			67.70	644.16	- 576.46 ^g	0.00
Los Angeles County Sanitation District No. 2	102.00	+ 4.73			106.73	81.90	+ 24.83	+ 10.20
Los Angeles County Sanitation District No. 1	1,352.00	- 95.20	- 200.00	1,000.00	227.20	0.00	+ 227.20 ^h	+ 35.20
Los Angeles County Waterworks District No. 22	51.00	+ 51.00		100.00	0.00	0.00	+ 100.00 ⁱ	+ 51.00
Los Angeles County-Western Avenue Golf Course	29.00	+ 29.60			32.60	154.21	+ 171.36 ^j	+ 29.60
Loyola University of Los Angeles	48.10	+ 4.81	- 52.91		0.00	0.00	0.00	0.00
Manhattan Beach, City of	1,131.20	+ 0.28	- 1,100.00		31.41	29.13	+ 2.28	+ 2.28
Mayflower Nurseries	1.00	+ 8.15 ^k	+ 1.00		12.15	2.47	+ 9.68	+ 9.68
McDonnell Douglas Corporation	1.00	0.00			3.00	0.00	+ 3.00	+ 2.00
Mobil Oil Corporation	2,571.00	+ 78.47	+ 1,448.00		4,097.47	4,097.47	+ 12.45	+ 12.45
Mori, Roy H. and Kenji	5.40	+ 2.00			7.40	0.00	+ 7.40	+ 2.00
Murphy Corporation, Aircraft Division	38.15	+ 3.82			41.97	0.00	+ 41.97	+ 3.82
Otani, Chiatsu	0.00	0.00	+ 20.00	+ 31.70	51.70	0.00	0.00	0.00
Pacific Crest Nursery Company	39.40	+ 3.94			43.34	37.25	+ 6.09	+ 3.94
Palos Verdes Seaside Farm	0.00	+ 2.83 ^l			2.83	7.31	+ 4.48	+ 2.83
Palos Verdes Water Company	999.00	0.00	- 999.00		0.00	0.00	0.00	0.00
Park Water Company	160.00	+ 26.81	+ 164.00		290.81	34.38	+ 7.19	+ 7.19
Phillips Petroleum Company	167.00	+ 0.70	+ 164.00		6.70	0.00	+ 6.70	+ 6.70
Rehor, Josephine P.	2.20	0.00	- 2.20		0.00	0.00	0.00	0.00
Rockwell, Michael L.	0.10	+ 0.20			0.30	0.00	+ 0.30	+ 0.30
Roman Catholic Archbishop of Los Angeles	72.30	+ 0.48	+ 58.00		130.78	127.80	+ 2.98	+ 2.91
Santa Fe Land Improvement Company	39.50	0.00		- 39.50	0.00	0.00	0.00	0.00
Sheets, Esther M.	5.50	+ 2.00			7.50	1.45	+ 6.05	+ 2.00
Shell Oil Company	4,510.00	+ 368.82			4,878.82	4,185.73	+ 693.09	+ 641.00
Shindas Brothers, Incorporated	22.50	+ 2.25			24.75	13.58	+ 11.19	+ 2.25
Southern California Edison Company	5,740.00	+ 4.90		- 31.70	5,713.20	8.42	+ 21.95	+ 2.40
Southern California Edison Company	1,548.14	+ 0.32			1,548.46	1,548.46	+ 0.27	+ 0.27
Spanish American Institute	44.40	+ 4.44			48.84	32.35	+ 16.49	+ 4.44
Spartanite Drinking Water Corporation	152.60	+ 15.26			167.86	117.89	+ 49.97	+ 15.26
Standard Oil Company of California	4,601.30	+ 60.13	- 4,600.00		1.43	0.00	+ 1.43	+ 2.00
Stauffer Chemical Company	521.00	+ 52.10	+ 30.00		603.10	544.06	+ 59.04	+ 59.04
Superior Oil Company	26.40	+ 2.64			29.04	0.00	+ 29.04	+ 2.64
Texas, Incorporated	3,432.00	+ 147.44		+ 1,333.30	4,882.74	3,891.98	+ 990.76	+ 440.43
Torrance, City of	3,844.73	- 32.73			3,772.00	1,806.95	+ 1,965.05	+ 8.00
Union Nursery, Incorporated	4.70	+ 0.47	+ 10.00		15.17	10.93	+ 4.24	+ 4.70
Union Oil Company of California	2,770.00	+ 13.90	- 884.00		1,899.90	1,970.35	- 46.45	- 46.45
United States Fertilizer Corporation	1,791.00	+ 75.24	- 160.00	- 300.00	1,406.24	1,592.90	- 218.70	+ 141.11
Western Land Company	80.20	+ 8.02			88.22	53.11	+ 35.11	+ 2.80
Wheatburn School District	8.20	+ 2.00			10.20	0.00	+ 10.20	+ 2.00
Ziesler, Maxwell T.	0.00	+ 10.47	+ 47.00		57.47	20.78	+ 36.69	+ 9.75
TOTAL	14,481.25	+ 1,149.01	0.00	0.00	15,630.26	11,923.93	+ 3,706.33	+ 2,351.15

^a See Table 1 for explanation of leased or purchased water right entitlements and new parties.

^b Includes 9 acre-feet of Exchange Pool water.

^c Entire amount is Exchange Pool water.

^d Includes extractions by Inglewood Golf Course.

^e Extractions by Los Angeles County, Alondra Park, Waterworks District Nos. 13 and 22, and Western Avenue Golf Course are covered by an equivalent water right. All three water rights are combined and any excess water is divided between the waterworks districts in proportion to water right.

Ground Water Extractions

The West Coast Basin Judgment limits the amount of ground water that each party can extract annually from the basin or release to the Exchange Pool for pumping by other parties. Table 4 summarizes each party's water account. The metered ground water production

from each active well in the basin is listed by party in Appendix B, which shows the total ground water production reported by each party. Gross water supply of all parties, which appears in Table 5, includes all sources of water necessary to provide each party's total water requirement for its service area. The service areas are shown on Plates 5 and 6 (pages 28-31).

Table 5. GROSS WATER USE
In acre-feet

Party	: Total :		Purchased supply :	
	: ground water :	: extractions :	Imported ^{a/} :	Within basin ^{b/} : Total supply
ABC Nursery, Incorporated	35.67			35.67
American Plant Growers, Inc.	29.89			29.89
Asahi Fancy Koi, Incorporated	0.00			0.00
Atlantic Richfield Company	11,331.33		1,886.01	13,217.34
Ballman, Rosemary	0.00		c/	c/
Boise Cascade Building Company	0.00		d/	d/
California Water Service Company	2,169.70	11,723.60		13,893.30
Carson-Madrona Company	0.00		d/	d/
Chandler's Palos Verdes Sand and Gravel Corporation	339.87			339.87
Coast Forest Products	0.00		d/	d/
Columbia Broadcasting System, Inc.	0.00			0.00
Curtis, Owen W.	0.00			0.00
Delaney, Golda, Estate of	0.00			0.00
Desser Enterprises	0.16			0.16
Dominguez Water Corporation	8,801.20	22,309.82 ^{e/}		31,111.02
El Segundo, City of	0.00	18,206.10		18,206.10
Engelsma, Jake	0.00		d/	d/
Etchemendy, Caroline, Estate of	0.00		c/	c/
Fletcher Oil and Refining Company	76.32		159.38	235.70
Fletcher, Robert G., Daniel S., and Wilfred D.	0.00		d/	d/
Fujimoto, Samuel R. and Raymond S.	7.26			7.26
Gillingham, Florence R., et al.	0.00		d/	d/
Gonzales, Felipe	0.00		c/	c/
Grant, John, Estate of	0.00		c/	c/
Harris Tube Incorporated	0.00		c/	c/
Hawthorne, City of	1,886.60	3,395.50		5,282.10
Hillside Memorial Park	36.03		59.55	95.58
Hollywood Turf Club	266.97		143.75	410.72
Industrial Chemical Division, Allied Chemical Corporation	193.10 ^{f/}		915.99	1,109.09
Inglewood, City of	4,342.54 ^{f/}	8,494.40 ^{f/}		12,836.94

GROSS WATER USE
In acre-feet
(continued)

Party	Total : ground water : extractions	Purchased supply : Imported ^{a/} : Within basin ^{b/}	Total supply
Inose, Kenichi	18.06		18.06
Ishibashi, Aki	29.37		29.37
Johns-Manville Products Corp.	858.89	559.36	1,418.25
Joughin Torrance Ranch	0.00	d/	d/
Lagerlof, Stanley C.	0.00		0.00
Lermens, Alfred	0.00		0.00
Leuzinger, Emma L.	0.00	c/	c/
Long Beach, City of	0.00	29,523.21 ^{e/}	29,523.21
Lopes, Frank	0.00		0.00
Los Angeles, City of	2,548.21	57,851.00 ^{b/}	60,399.21
Los Angeles County - Alondra Park	644.16	106.42	750.58
Los Angeles County Sanitation District No. 2	85.90	198.40	284.30
Los Angeles County Waterworks District No. 13	0	2,450.80	2,450.80
Los Angeles County Waterworks District No. 22	0	1,447.70	1,447.70
Los Angeles County - Western Avenue Golf Course	154.21	88.39	242.60
Loyola University of Los Angeles	0.00	146.00	146.00
Manhattan Beach, City of	29.13	6,263.70	6,292.83
Mayflower Nurseries	2.67		2.67
McDonnell Douglas Corporation	0.00	d/	d/
Mobil Oil Corporation	4,284.02	3,273.93	7,557.95
Mori, Roy H. and Kenji	0.00		0.00
Northrup Corporation, Aircraft Division	0.00		0.00
Otani, Chisato	51.70		51.70
Pacific Crest Cemetery Company	37.25	0.00	37.25
Palos Verdes Begonia Farm	2.30		2.30
Palos Verdes Water Company	0.00	15,038.50	15,038.50
Park Water Company	306.38		306.38
Phillips Petroleum Company	0.00	13.18	13.18
Rehor, Josephine P.	0.00	c/	c/
Rockwell, Michael L.	0.00		0.00
Roman Catholic Archbishop of Los Angeles	127.87		127.87
Santa Fe Land Improvement Company	0.00	d/	d/
Sheets, Esther M.	1.45		1.45
Shell Oil Company	4,185.73	3,980.45	8,166.18
Shinoda Brothers, Incorporated	13.56		13.56
Southern California Edison Company	8.42	0.71	9.13
Southern California Water Company	6,548.69	22,758.99 ^{f/} 395.69	29,703.37
Spanish American Institute	12.35		12.35
Sparkletts Drinking Water Corporation	117.89		117.89
Standard Oil Company of California	0.00	14,514.00	14,514.00

GROSS WATER USE
In acre-feet
(continued)

Party	Total		Purchased supply		Total supply
	ground water		Imported ^{a/} : Within basin ^{b/}		
	extractions				
Stauffer Chemical Company	544.98		237.89		782.87
Superior Oil Company	0.00				0.00
Texaco, Incorporated	3,891.98		1,922.30		5,814.28
Torrance, City of	3,780.95	20,338.66			24,119.61
Union Nursery, Incorporated	17.93				17.93
Union Oil Company of California	1,930.35		5,729.06		7,659.41
United States Steel Corporation	1,092.94		229.37		1,322.31
Watson Land Company	53.17		54.58		107.75
Wiseburn School District	0.00		73.14		73.14
Ziegler, Maxwell T.	26.78				26.78

- a/ Imports from Metropolitan Water District or member agency unless otherwise noted.
b/ Purchased from municipal, mutual, or public utility water agency.
c/ Domestic use with consumption less than one acre-foot purchased from public utility.
d/ Information not available.
e/ Includes 4,006.02 acre-feet of Central Basin ground water.
f/ Of this amount 26.77% is exported to Central Basin.
g/ Includes Central Basin ground water.
h/ Imported from Owens River-Mono Basin.
i/ Includes 747.09 acre-feet of Central Basin ground water.

**Extractions by Nonparties and
Parties with no Adjudicated Rights**

Several nonparties and parties with zero Adjudicated Rights pump water from the West Coast Basin. Parties with zero water rights have abided by the Judgment

by offsetting their extractions with Exchange Pool water purchases. Extractions reported to the Central and West Basin Replenishment appear in Table 6.

Imported Supplies

Large quantities of water are imported to the West Coast Basin from other sources. Water from the Colorado River arrives through facilities of the Metropolitan Water District of Southern California for distribution by the cities of Long Beach, Los Angeles, and Torrance and the West Basin Municipal Water District. Los Angeles also imports water from the Owens River-Mono Basin in eastern central California. The Dominguez Water Corporation, Long Beach, and the Southern California Water Company import ground water from the Central Basin to supplement other supplies.

TABLE 6. EXTRactions BY NONPARTIES AND PARTIES
WITH ZERO ADJUDICATED RIGHTS

Pumper	State Well No.	Amount pumped, in acre-feet
Cost, Edward	38/13W-3001	0.30
Desser Inter rises*	48/13W-35 1	0.1
Ishibashi, Aki*	48/14W-2441	29.37
Mayflower Nurseries*	38/14W-298A	0.50
"	38/13W-31.7	2.10
		2.40
McFadden, John K.	38/13W-10K2	0.00
Onani, "Hisato"	38/14W-33:4	15.00
"	38/14W-32B4	2.00
		17.00
Falco Verdeo Begonia farm*	38/14W-21.1	2.30
Pioneer Paper Stock Company	38/13W-41:2	1.80
Three Star Nursery	38/14W-33B3	0.02
Ziegler, Maxwell T.*	38/13W-31M1	26.78
TOTAL		121.00

*Parties to the Judgment, shown in Table 4.

All imports to the West Coast Basin, with the exception of imports by two





LIST OF MUNICIPAL, MUTUAL AND PUBLIC UTILITY WATER SERVICE AGENCIES

Area number	Entity	Location on plate
1	California American Water Company (Norquay)	B-2
1 A	California Water Service Company	F-5
2	Domiguiz Water Corporation	C-8
3	El Segundo City of	F-3
4	Hawthorne City of	F-4
5	Inglewood City of	F-3
6	Long Beach City of	F-11
7	Los Angeles City of	F-9
8	Los Angeles County Waterworks District No. 13	E-8
9	Los Angeles County Waterworks District No. 22	A
9 A	Los Angeles County Waterworks District No. 26 (Norquay)	E-1
10	Manhattan Beach City of	F-4
11	Palms Verdes Water Company	C-8
12	Park Water Company	F-5
12 A	Signal Hill City of (Norquay)	B-11
13	Southern California Water Company	H-4
14	Torrance City of	F-1

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT
WEST COAST BASIN WATERMASTER SERVICE

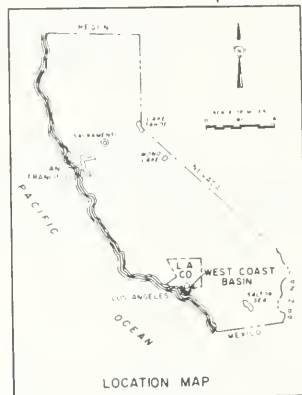
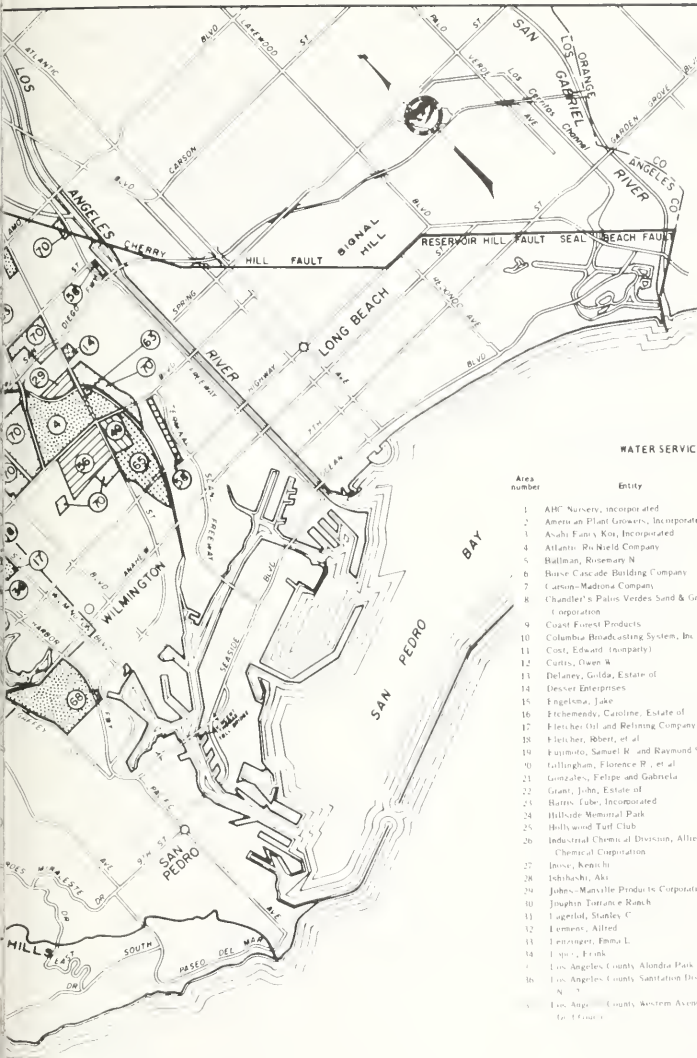
WATER SERVICE AREAS OF
MUNICIPAL, MUTUAL AND PUBLIC UTILITY
WATER SERVICE AGENCIES
SEPTEMBER 1971

LEGEND

..... DISTRIBUTION SYSTEM OF THE METROPOLITAN
WATER DISTRICT OF SOUTHERN CALIFORNIA
— BASIN BOUNDARY







INDEX
WATER SERVICE AREA OF INDIVIDUAL PRODUCERS

Area number	Entity	Location Area on plate number	Entity	Location on plate	
1	AHC Nursery, Incorporated	B-7	18	Los Angeles University of Los Angeles	C-1
2	Amerus Plant Growers, Incorporated	D-8	19	Mayflower Nurseries	F-6
3	Avahi Farms, Inc., Incorporated	A	40	M. Dwyer Douglas Corporation	D-6
4	Allison, DuWard Company	C-9	41	M. Fadden John K. (company)	B-6
5	Bullman, Rosemary N.	B-2	42	Mobil Oil Corporation	D-6
6	Base Cascade Building Company	L-7	43	Mori, Roy H. and Kenji	C-6
7	Carson-Madison Company	E-6	44	Nurthing Corporation, Amrall (D-5)	C-4
8	Chandler's Palms Verdes Sand & Gravel Corporation	F-4	45	Ortiz, Charles	D-5
9	Coast Forest Products	B-8	46	Palms Crest Cemetery Company	D-7
10	Columbia Broadcasting System, Inc. Cost, Edward (company)	D-5	47	Palms Verdes Begonia Farm	F-6
11	Curtis, Owen M.	D-8	48	Pel Haven Cemetery (company)	C-7
12	DeLaney, Gilda, Estate of	C-9	49	Phillips Petroleum Company	D-9
13	Dexter Enterprises	A	50	Pioneer Paper Stock (company)	C-6
14	Engelma, Jake	C-7	51	Roho, Josephine P.	B-6
15	Etchemendy, Caroline, Estate of	C-7	52	Roswell, Michael L.	B-6
16	Fletcher Oil and Refining Company	D-8	53	Roman Catholic Archbishop of Los Angeles	B-1
17	Fletcher, Robert, et al.	D-8	54	Santa Fe Land Improvement Company	D-4
18	Fujimoto, Samuel K. and Raymond S.	B-6	55	Sheets, Fisher W.	C-7
19	Gallagher, Florence P., et al.	B-4	56	Shell Oil Company	F-8, D-4
20	Goetzales, Felipe and Gabriela	D-5	57	Shimoda Brothers, Incorporated	D-6
21	Grant, John, Estate of	B-7	58	Southern California Edison Company	B-9, D-5, 10
22	Harris, Cuba, Incorporated	B-7	59	Spanish American Institute	B-6
23	Hillside Memorial Park	B-2	60	Sparklers Drinking Water Corporation	D-3
24	Hollywood Turf Club	B-1	61	Standard Oil Company of California	D-3
25	Industrial Chemical Division, Allied Chemical Corporation	D-1	62	Standard Oil Company of California, Leavens on Isabela J. Grant Estate	F-7, 11, 2
26	Inoue, Kenji H.	B-7	63	Stachler Chemical Company	C-8, 9
27	Ishikoshi, Aki	D-8	64	Superior Oil Company, Leavens on Isabela J. Grant Estate	F-2
28	Johns, Manville Products Corporation	C-9	65	Texas, Incorporated	D-9
29	Joseph Torrance Ranch	E-7, 8	66	Three Star Nursery, Inc. (company)	D-5
30	Laguarda, Stanley C.	A	67	Union Nursery, Incorporated	B-7
31	Lemore, Alfred	F-8	68	Union Oil Company of California	F-9
32	Levinson, Emma L.	C-1	69	United States Steel Corporation	D-6
33	Lopez, Frank	C-1	70	Watson Land Company	B-9, C-8, 9
34	Los Angeles County Alondra Park	D-5	71	Westham School District	D-1
35	Los Angeles County Sanitation District No. 1	F-8	72	Ziegler, Maxwell T.	C-6
36	Los Angeles County Western Avenue Land Co.	B			

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT
WEST COAST BASIN WATERMASTER SERVICE

WATER SERVICE AREAS OF
INDIVIDUAL PRODUCERS
SEPTEMBER 1971



nonparties, are listed in Table 7. The California-American Water Company imported 3,166 acre-feet and the City of Signal Hill imported 915 acre-feet. Both are nonparties.

Exported Supplies

Exports from the West Coast Basin are small. The City of Inglewood exported

3,427 acre-feet of ground water and Colorado River water to the Central Basin. The City of Los Angeles exported 1,394 acre-feet and the Palos Verdes Water Company exported 8,025 acre-feet of ground water and Colorado River water to portions of their service areas lying west of the Palos Verdes Hills.

Table 7. IMPORTED WATER

Source	Imported	Quantity, in acre-feet	
		1969-70	1970-71
Central Basin Ground Water	Dominguez Water Corporation	3,962	4,006
	Southern California Water Company	<u>1,000</u>	<u>747</u>
		4,962	4,753
Central Basin Ground Water and Colorado River Water	City of Long Beach	32,463	29,523
Colorado River Water	City of Torrance	20,388	20,339
	West Basin Municipal Water District		
	California Water Service Company	11,932	11,724
	Dominguez Water Corporation	17,017	18,304
	El Segundo, City of	20,751	18,206
	Hawthorne, City of	3,966	3,395
	Inglewood, City of	9,286	8,494
	Los Angeles County Waterworks, District No. 13	2,593	2,451
	Los Angeles County Waterworks, District No. 22	1,685	1,448
	Manhattan Beach, City of	6,077	6,264
	Palos Verdes Water Company	15,360	15,038
	Southern California Water Company	22,228	22,012
	Los Angeles County Flood Control District	<u>29,461*</u>	<u>32,085*</u>
		160,744	159,760
	Owens River-Mono Basin Water and Colorado River Water		
	Los Angeles, City of	<u>58,844</u>	<u>57,851</u>
	TOTAL-ALL SOURCES	257,013	251,887

*Delivered to Los Angeles County Flood Control District by the City of El Segundo for use in the West Coast Basin Barrier Project.

IV. ADMINISTRATION OF THE JUDGMENT

The West Coast Basin Judgment was a logical step toward preserving the usefulness of a valuable resource. It provides a flexible tool to limit extractions and still allow a beneficial use of the ground water supply. However, the restrictions on extractions imposed by the Judgment forces the parties to look for other supplies. Fortunately, these are available. If they were not, the rapidly increasing demand for water might literally bankrupt the basin before other management techniques could be developed.

Exchange Pool

The Court and parties foresaw that adjudicating water rights and limiting total extractions within the basin would not be satisfactory to all parties. As a consequence, Paragraph VII of the Judgment authorized a water Exchange Pool to provide additional water rights to members without supplemental water. Membership in the Exchange Pool is voluntary, and any party can join by filing an "Intention to be Bound by Paragraph VII of the Judgment"

with the Water-master and the Court. Recipients of exchange water may pump the amounts released to them in addition to their Adjudicated Right. Releases are limited by the Judgment. Tables 8 and 9 summarize 1970-71 Exchange Pool transactions.

Once each July the Watermaster opens the Exchange Pool to permit the inter-member exchange of water rights. The Pool is in operation when the Watermaster asks each member to estimate his water requirement and supply for the next water year. If a member has supplemental water in addition to his Adjudicated Right and if his total supply exceeds his estimated requirement, he must make a Mandatory Offer to lease a portion of his pumping right equal to the difference between his Adjudicated Right and half his estimated requirement. Under no circumstance, however, can the Mandatory Offer and the estimated requirement together exceed the total supply. This limits the Mandatory Offer to an amount which can be replaced with supplemental water.

Another type of offer is called the Voluntary Offer. Any member may volun-

Table 8. EXCHANGE POOL OFFERS

Party	Amount, in acre-feet		Price, per acre-foot	Charge for exchange water
	Offered	Released		
<u>Mandatory Offers</u>				
L. A. County Waterworks District No. 13	220.00	220.00	\$ 11.00	\$ 2,420.00
Phillips Petroleum Company	161.00	161.00	11.00	1,771.00
Baillman, Frank A. and Rosemary	7.00	7.00	12.00	84.00
Gillingham, Florence et al.	2.40	2.40	12.00	28.80
U.S. Steel Corporation	330.00	100.00	22.00	3,532.00
Steufter Chemical	118.00	6	60.00 ^{a/}	--
TOTALS	808.40	551.00		\$ 7,837.00
<u>Voluntary Offers</u>				
California Water Service Company	1,000.00		\$ 35.30	--
Fletcher Oil & Refining Company	25.00		25.00	--
A. Lorenz	.70		11.00	--
TOTAL	1,025.70			

a/ Cost assuming all of the offered water was sold.

Table 9. EXCHANGE POOL REQUESTS

Party	Amount of water received, in acre-feet	Cost of exchange water ^{a/}
ABC Nursery, Incorporated	9.00	\$ 128.01
Chandler's Palos Verdes Sand and Gravel Company	146.00	2,076.59
Deaser Enterprises	2.00	28.45
Hillside Memorial Park	37.00	526.20
Inoue, Kenichi	14.00	199.13
Ishibashi, Aki	40.00	568.93
Mayflower Nursery	4.00	56.89
Otani, Chisato	20.00	284.46
Park Water Company	164.00	2,332.61
Roman Catholic Archbishop of Los Angeles	58.00	824.95
Union Nursery, Incorporated	10.00	142.23
Ziegler, Maxwell T.	47.00	648.49
TOTALS	551.00	\$ 7,837.00

a/ Cost at \$14.2232 per acre-foot.

tarily offer pumping rights to the Exchange Pool if his water supply exceeds his estimated requirement and he has no supplemental supply. However, the Watermaster must allocate all Mandatory Offers before using the Voluntary Offers. Voluntary Offers have not been used for several years.

The charge for a Mandatory Offer cannot exceed the cost per acre-foot of replacement water; the charge for a Voluntary Offer cannot exceed the price per acre-foot charged by the West Basin Municipal Water District for imported water. The Watermaster determines the amount of water needed and computes the average price to be paid.

If a member's estimated water requirement exceeds his total water right, including leases, and he has no supplemental supply, the difference may be requested from the Exchange Pool. The cost per acre-foot is the weighted average price per acre-foot of all offers required to meet requests.

Transfers of Adjudicated Rights

The West Coast Basin Exchange Pool is not the only method of obtaining additional pumping rights. Each year there are several lease and sale transactions between parties. Table 10 lists all leases, sales, parties, and amounts involved. Appendix A contains a copy of the document substantiating each transfer.

Appendix A also contains samples of our recommended lease and sale agreements. Most of the documents received by the Watermaster are unnecessarily complex. The Watermaster recommends that all documents be prepared on 8-1/2 x 11-inch paper. Any necessary additions to the recommended agreement may be attached to another page. You need not use these sample documents, but they are sufficient for most purposes.

The "General Information, Policies and Procedures" of the Watermaster Service

in the West Coast Basin is being revised to read as follows:

"In order that a water right lease be in force (applicable) during a particular water year, it must have been executed by the parties involved before or prior to September 1 of the water year in question. In addition, the executed water right lease document should be filed with the Watermaster no later than August 31 or postmarked August 31 of the water year in question. Any otherwise valid agreement not filed with the Watermaster prior to September 1 of the water year in question will be void and of no force or effect for the transfer of water rights."

Overextractions

Each year some parties extract more ground water from the West Coast Basin than they are entitled to. The overextractions are usually small, occurring within the tolerance set by the Judgment. The Judgment allows each party to overextract by 2 acre-feet, or by 10 percent of its Adjudicated Right, whichever is larger, on the premise that the overextraction will be eliminated during the following year.

Most overextractions are the result of an unexpected increase in water demand. Therefore, allowing some deviations from the limits and guidelines of the Judgment is considered a reasonable solution.

Table 11 summarizes all overextractions taken during the 1970-71 water year. Of the nine parties overextracting ground water, five exceeded the limit imposed by the Judgment. All five bought Exchange Pool water for the 1971-72 water year to cover their overextractions and to meet their 1971-72 water needs. One party is a farmer having a zero water right and no supplemental water source. To meet his water

Table 10. TRANSFERS OF ADJUDICATED RIGHTS

Party	:	Transaction and Amount,	:	Party
	:	in acre-feet	:	
American Plant Growers, Incorporated		leased 20.00	from	California Water Service Company
Asahi Fancy Koi, Incorporated		" 12.10	"	Engelsma, Jake
Associated Southern Investment Company		sold 46.70	to	Southern California Edison Company
Atlantic Richfield Company		leased 1000.00	from	Dominguez Water Corporation
"		" 900.00	"	El Segundo, City of
"		" 1100.00	"	Manhattan Beach, City of
"		" 3100.00	"	Standard Oil Company of California
"		" 800.00	"	Union Oil Company of California
California Water Service Company		" 20.00	to	American Plant Growers, Incorporated
Carson-Madrona Company		" 104.00	"	Dominguez Water Corporation
Columbia Broadcasting System, Incorporated		" 9.50	"	Dominguez Water Corporation
Dominguez Water Corporation		" 1000.00	"	Atlantic Richfield Company
"		" 104.00	from	Carson-Madrona Company
"		" 9.50	"	Columbia Broadcasting System, Incorporated
"		" 8.20	"	Etchemendy, Caroline, Estate of
"		" 5.50	"	Lagerlof, Stanley C.
"		" 52.91	"	Loyola University of Los Angeles
"		" 148.00	to	Mobil Oil Corporation
"		" 350.00	from	Pico County Water District
"		" 39.50	"	Santa Fe Land Improvement Company
"		" 20.00	"	Watson Land Company
El Segundo, City of		" 900.00	to	Atlantic Richfield Company
Engelsma, Jake		" 12.10	to	Asahi Fancy Koi, Incorporated
Etchemendy, Caroline, Estate of		" 8.20	"	Dominguez Water Corporation
Gonzales, Felipe		" 34.30	"	Texaco, Incorporated
Inose, Kenichi		" 2.20	from	Rehor, Josephine P.
Lagerlof, Stanley C.		" 5.50	to	Dominguez Water Corporation
Los Angeles, City of		" 1000.00	from	Los Angeles County Waterworks District No. 13
Los Angeles County Waterworks District No. 13		" 1000.00	to	Los Angeles, City of
Loyola University of Los Angeles		" 52.91	"	Dominguez Water Corporation
Manhattan Beach, City of		" 1100.00	"	Atlantic Richfield Company
Mobil Oil Corporation		" 1500.00	from	Standard Oil Company of California
"		" 148.00	"	Dominguez Water Corporation
Otani, Chisato		" 31.70	"	Southern California Edison Company
Palos Verdes Water Company		" 999.00	to	Texaco, Incorporated
Pico County Water District		" 350.00	"	Dominguez Water Corporation
"		" 30.00	"	Stauffer Chemical Company
"		" 380.00	from	United States Steel Corporation
Rehor, Josephine P.		" 2.20	to	Inose, Kenichi
Santa Fe Land Improvement Company		" 39.50	"	Dominguez Water Corporation
Southern California Edison Company		purchased 46.70	from	Associated Southern Investment Company
"		leased 31.70	to	Otani, Chisato
Standard Oil Company of California		" 3100.00	"	Atlantic Richfield Company
"		" 1500.00	"	Mobil Oil Corporation
Stauffer Chemical Company		" 30.00	from	Pico County Water District
Texaco, Incorporated		" 34.30	"	Gonzales, Felipe
"		" 999.00	"	Palos Verdes Water Company
Union Oil Company of California		" 800.00	to	Atlantic Richfield Company
United States Steel Corporation		" 380.00	to	Pico County Water District
Watson Land Company		" 20.00	to	Dominguez Water Corporation

demands he purchases Exchange Pool water each year.

In view of the difficulty of estimating water needs one year in advance, all the parties concerned either have purchased Exchange Pool water or have

been advised by the Watermaster to lease water rights for the 1971-72 water year. The Watermaster recommends that no court action be taken at this time toward the parties exceeding the limit.

Table 11. OVEREXTRACTIONS
In acre-feet

Party	(1) Adjudicated Right ^a	(2) Allowable Extractions ^b	(3) Amount Pumped	(4) Overextraction $(2)-(3)=(4)$	(5) Allowable Overextraction ^c	(6) Overextraction in percent of Adjudicated Right $\frac{(4)}{(1)} \times 100 = (6)$
ABC Nursery, Incorporated	22.10	26.66	35.67	- 9.01 ^d	2.21	40.77
American Plant Growers, Incorporated	30.00	26.58	29.89	- 3.31 ^d	3.00	11.03
Inose, Kenichi	7.60	15.68	18.06	- 2.38 ^d	2.00	31.32
Ishibashi, Aki	0.00	23.94	29.37	- 5.43 ^d	2.00	-
Park Water Company	160.00	299.19	306.38	- 7.19	16.00	4.49
Torrance, City of	3,804.73	3,772.00	3,780.95	- 8.95	380.47	0.24
Union Nursery, Incorporated	4.70	15.31	17.93	- 2.62 ^d	2.00	55.74
Union Oil Company of California	2,670.00	1,883.90	1,930.35	-46.45	267.00	1.74
Watson Land Company	60.20	51.17	53.17	- 2.00	6.02	3.32
Totals	6,759.33	6,114.43	6,201.77	-87.34	680.70	

a/ Includes water right leases.

b/ See column (5) of Table 4 for derivation.

c/ Computed as 2 acre-feet or 10 percent of Adjudicated Right [Column (1)] whichever is larger.

d/ In violation of Judgment.

V. ADMINISTRATIVE COSTS

Expenses incurred in administering watermaster service areas are payable one-half by the State and one-half by the parties. To obtain the funds required for watermaster service, the Watermaster prepares a tentative budget each year stating the anticipated expense for administering the provisions of the Judgment. A copy of the tentative budget is mailed to each of the parties at least 60 days before the beginning of each water year. If no objections are received within 15 days after service of the tentative budget, it becomes the final budget.

The 1970-71 tentative budget, which was mailed on July 31, 1970, received no objections and became the final budget on August 15, 1970. The final approved budget is presented in Table 12.

The administrative cost chargeable to each party is in proportion to its "Adjudicated Right" and is payable on or prior to the first day of the water year. A five percent penalty is added if charges become delinquent. A total of \$1.98 was collected in penalties for delayed payments. Apportionment of the parties share of the budget for the 1970-71 water year is set forth in Table 13.

Income and expenditures for watermaster service during the 1970-71 water year are shown in Table 14. Any credit or debit balance is carried forward into the succeeding water year. The parties' share of the 1970-71 carry-over amounts to \$2,783.69.

TABLE 12

APPROVED BUDGET FOR 1970-71

Salaries and wages	\$28,245	
Operating expenses	<u>12,187</u>	
TOTAL BUDGET		\$40,432
One-half payable by State		\$20,216
One-half payable by parties		\$20,216
Less carryover from 1969-70		<u>- 7,216</u>
TOTAL AMOUNT TO BE BILLED		\$13,000

Table 13. APPORTIONMENT OF PARTIES' SHARE OF 1970-71 BUDGET

Party	: Adjudicated : : Right, : : in acre-feet : Apportionment Paid
ABC Nursery, Incorporated	22.10 \$ 4.46
American Plant Growers, Incorporated	10.00 2.02 ^a / _a
Asahi Fancy Koi, Incorporated	2.00 0.40
Associated Southern Investment Company	46.70 9.42
Atlantic Richfield Company	4,428.00 892.89
Ballman, Frank A., Estate of	7.00 1.41 ^a / _a
California Water Service Company	3,071.00 619.26
Carson-Madrona Company	104.00 20.97 ^c / _c
Chandler's Palos Verdes Sand and Gravel Corp.	294.20 59.32
Coast Forest Products	3.40 0.69 ^a / _a
Columbia Broadcasting System, Incorporated	9.50 1.92 ^a / _a
Curtis, Owen W.	0.36 0.07 ^a / _a
Delaney, Golda, Estate of	4.10 0.83 ^a / _a
Desser Enterprises	0.00 0.00 ^a / _a
Dominguez Water Corporation	10,150.65 2,046.85
El Segundo, City of	953.00 192.17
Engelsma, Jake	12.10 2.44 ^a / _a
Etchemendy, Caroline, Estate of	8.20 1.65 ^a / _a
Fletcher Oil and Refining Company	86.30 17.40
Fujimoto, Samuel R. and Raymond S.	20.00 4.03
Gillingham, Florence R., et al.	2.40 0.48 ^a / _a
Gonzales, Felipe	34.30 6.92
Grant, John, Estate of	49.00 11.90
Harris Tube, Incorporated	0.70 0.14 ^a / _a
Hawthorne, City of	1,882.00 379.50
Hillside Memorial Park	29.20 5.89 ^c / _c
Hollywood Turf Club	282.00 56.86
Industrial Chemical Division - Allied Chemical Corporation	255.00 51.42
Inglewood, City of	4,385.17 884.26
Inose, Kenichi	5.40 1.09 ^a / _a
Ishibashi, Aki	0.00 0.00 ^a / _a
Johns-Manville Products Corporation	881.00 177.65
Joughin Torrance Ranch	20.25 ^e / _e 4.08
Jungquist, Fred A. ^b / _b	3.70 0.75 ^a / _a
Lagerlof, Stanley C.	3.50 0.71 ^a / _a
Lermens, Alfred	0.70 0.14 ^a / _a
Leuzinger, Emma L.	1.40 0.28 ^a / _a
Long Beach, City of	0.70 0.14 ^a / _a
Lopes, Frank	3.70 0.75 ^a / _a
Los Angeles, City of	1,503.00 303.08
Los Angeles County - Alondra Park	67.70 13.65
Los Angeles County Sanitation District No. 2	102.00 20.57
Los Angeles County Waterworks District No. 13	1,352.00 272.63
Los Angeles County Waterworks District No. 22	551.00 111.11
Los Angeles County-Western Avenue Golf Course	296.00 59.69

APPORTIONMENT OF PARTIES' SHARE OF 1970-71 BUDGET
(continued)

Party	: Adjudicated : : Right, : Apportionment ; in acre-feet : Paid
Loyola University of Los Angeles	48.10 9.70 ^{c/}
Manhattan Beach, City of	1,131.20 228.10 ^{a/}
Mayflower Nurseries	0.00 0.00 ^{c/}
McDonnell Douglas Corporation	1.70 0.34 ^{a/}
Mobil Oil Corporation	2,570.00 518.23
Moran, Ronald E. ^{b/}	9.00 1.81 ^{a/}
Mori, Roy H. and Kenji	5.60 1.13 ^{a/}
Northrop Corporation, Aircraft Division	38.15 7.69
Otani, Chisato	0.00 0.00 ^{a/}
Pacific Crest Cemetery Company	39.40 7.94
Palos Verdes Begonia Farm	0.00 0.00 ^{a/}
Palos Verdes Water Company	999.00 201.45
Park Water Company	160.00 32.26
Phillips Petroleum Company	167.00 33.68 ^{a/}
Rehor, Josephine P.	2.20 0.44 ^{a/}
Rockwell, Michael L.	0.10 0.02 ^{a/}
Roman Catholic Archbishop of Los Angeles	72.30 14.58 ^{c/}
Santa Fe Land Improvement Company	39.50 7.97
Sheets, Esther M.	5.50 1.11 ^{a/}
Shell Oil Company	4,516.00 910.64
Shinoda Brothers, Incorporated	22.50 4.54 ^{a/}
Southern California Edison Company	10.40 2.10 ^{a/}
Southern California Water Company	6,548.64 1,320.52
Spanish American Institute	44.40 8.95
Sparkletts Drinking Water Corporation	152.60 30.77
Standard Oil Company of California	4,601.30 927.84
Stauffer Chemical Company	521.00 105.06
Superior Oil Company	26.40 5.32
Texaco, Incorporated	3,432.00 692.05
Torrance, City of	3,795.73 765.40
Union Nursery, Incorporated	4.70 0.95 ^{a/}
Union Oil Company of California	2,670.00 538.40
United States Steel Corporation	1,791.00 361.15
Watson Land Company	80.20 16.17 ^{a/}
Wiseburn School District	8.20 1.65 ^{a/}
Ziegler, Maxwell T.	0.00 0.00 ^{a/}
TOTALS	64,468.25 12,999.85 ^{a/}

a/ Payment waived on apportionment of less than \$ 3.00 in accordance with Section 13943.5 of the Government Code. A total of \$25.46 was waived in this manner.

b/ Was a party at the time of billing.

c/ Delayed payment, penalty assessed. A total of \$1.98 was collected in penalties.

e/ Owned total adjudicated right at the time of billing.

Table 14. 1970-71 INCOME AND EXPENDITURES

Item	Parties	State	Parties and State
<u>Income</u>			
From 1970-71 budget	\$12,974.39	\$20,216.00	\$33,190.39
Balance from 1969-70	10,944.72		10,944.72
From budget penalties	1.98		1.98
TOTAL INCOME	\$23,921.09	\$20,216.00	\$44,137.09
<u>Expenditures</u>			
Salaries and wages	\$15,649.31	\$15,649.31	\$31,298.62
Operating expenses			
Miscellaneous indirect cost ^{a/}	3,368.61	3,368.61	6,737.22
Travel in State	76.57	76.58	153.15
Printing annual report	296.70	296.70	593.40
Electronic machine computing	1,383.18	1,383.18	2,766.36
Other ^{b/}	363.03	363.02	726.05
TOTAL EXPENDITURES	\$21,137.40	\$21,137.40	\$42,274.80
BALANCE	\$ 2,783.69 ^{c/}	\$- 921.40	\$ 1,862.29

a/ Rent, utilities, auto rental, communications, retirement, employee's health plan, and workmen's compensation insurance.

b/ Equipment rental, mobile equipment operation, engineering contracts.

c/ Total credit to parties in 1971-72 water year, subject to delayed charges or credits.

A P P E N D I X A

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1971

AND

COPIES OF DOCUMENTS SUBSTANTIATING
TRANSFERS OF ADJUDICATED RIGHT

APPENDIX A

TABLE OF CONTENTS

	<u>Page</u>
Adjudicated Right of West Coast Basin Parties	
September 1971	44
Copies of Documents Substantiating Transfer of Adjudicated Right	58
<u>Party</u>	<u>Agreement with</u>
American Plant Growers, Incorporated	California Water Service Company 58
Asahi Fancy Koi, Incorporated	Engelsma, Jake (See 1969-70 report)
Atlantic Richfield Company	Dominguez Water Corporation 58
	El Segundo, City of 59
	Manhattan Beach, City of 59
	Standard Oil Company of California 60
	Union Oil Company of California 60
Dominguez Water Corporation	Carson-Madrone Company 60
	Columbia Broadcasting System, Inc. 61
	Etchemendy, Caroline, Estate of 61
	Lagerlof, Stanley C. 62
	Loyola University of Los Angeles 62
	Pico County Water District 63
	Santa Fe Land Improvement Company 63
	Watson Land Company. 64
Inose, Kenichi	Rehor, Josephine P. (See 1966-67 report)
Los Angeles, City of	Los Angeles County Waterworks, District No. 13 64
Mobil Oil Corporation	Dominguez Water Corporation 64
	Standard Oil Company of California 65
Otani, Chisato	Southern California Edison Company 66
Pico County Water District	United States Steel Corporation 67
Southern California Edison Company	Associated Southern Investment Company 67

TABLE OF CONTENTS (Continued)

<u>Party</u>	<u>Agreement with</u>	Page
Stauffer Chemical Company	Pico County Water District	68
Texaco, Incorporated	Gonzales, Felipe and Gabriela (See 1966-67 report) Palos Verdes Water Company (See 1969-70 report)	
Suggested Samples of Documents for Transferring Water Rights		68
Form for Selling Water Rights		68
Form for Leasing Water Rights		68

**ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1971**

Party		Adjudicated Right, in acre-feet per year
*ABC Nursery, Incorporated		
Successor to Sidney R. and Charlotte W. Title		
Successor to Keith W. and Opal B. Schlaegel	13.60	
Successor to William and Clara R. Verburg	6.70	
Successor to Harry C. Jenkins	<u>1.80</u>	
		22.10
Abell, Frank		
Sold to City of Inglewood	— 1.80	
		0.00
Alcast Foundry, et al.		
Successor to Chas. L. Draper, et al.	7.20	
Sold to City of Torrance	— <u>7.20</u>	
		0.00
Alwag, Hilario S. and Emma		
Successor to T. C. Navarro	53.90	
Successor to Peggy Swick	5.50	
Sold to Torrance Unified School District	— <u>59.40</u>	
		0.00
*American Plant Growers, Incorporated		
Second West Coast Basin Judgment	2.60	
Successor to Ben Cluff Dairy		
Successor to Emily and Edward Cost	<u>7.40</u>	
		10.00
Anderson, Reinbert C.		
Sold to Sparkletts Drinking Water Corporation	80.50	
	— <u>80.50</u>	
		0.00
Asahi Fancy Koi, Incorporated		
Successor in part to Jake Engelsma	2.00	
Associated Southern Investment Company		2.00
(formerly Edison Securities Company)	46.70	
Sold to Southern California Edison Company	— 46.70	
		0.00
Atlantic Richfield Company		
(formerly Richfield Oil Company)		4,428.00
Ballman, Rosemary N.		
		7.00
Bank of America National Trust and Savings		
Association (Trust BI-51)	0.10	
Released to Michael L. Rockwell	— <u>0.10</u>	
		0.00
Barclay, Richard and R. A. Watt		
Successors in part to Isabela J. Granz Estate		
Successor in part to Isabela J. Granz	13.55	
Successors to Emma J. Osborn		
Successor in part to Isabela J. Granz	32.66	
Successors in part to George R. Murdock		
Successor in part to Isabela J. Granz	13.75	
Sold to City of Torrance	— <u>59.96</u>	
		0.00

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES SEPTEMBER 1971

(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
Bauman, Gus A. Transferred to Palos Verdes Begonia Farm		0.00
Bego Corporation Sold to Estate of Golda Delaney	4.10 - 4.10	0.00
Burke, W. F. and Lois Price Sold to H. S. Scott	9.50 - 9.50	0.00
Belvidere Mutual Water Company Sold to City of Torrance	33.40 - 33.40	0.00
Boise Cascade Building Company Successor in Part to Joughin Torrance Ranch Successor in part to Isabela J. Granz		16.92
California, State of Successor to Robert L. Fullilove Successor in part to Kelly Pipe Company Successor to Joe Moniz Jr. Successor in part to Flavio Rodriguez Successor in part to A. H. Smith, Sam Surber and Freda Smith Sold to Sparkletts Drinking Water Corporation	1.00 16.30 2.20 4.00 2.60 - 26.10	0.00
*California Water Service Company		3,071.00
Carson Estate Company Sold to Dominguez Water Corporation	130.00 - 130.00	0.00
*Carson-Madrone Company Successor to Chanslor-Western Oil and Development Co.		104.00
*Chandler's Palos Verdes Sand and Gravel Corporation Successor to Southwestern Portland Cement Company Second West Coast Basin Judgment Successor to Torrance Sand and Gravel Corporation Successor to Western Investment Company	15.00 95.20 184.00	294.20
Chanslor-Western Oil and Development Company (Formerly Chanslor-Canfield Midway Oil Company) Sold to Carson-Madrone Company	104.00 - 104.00	0.00
Christie, Clem; Don C. Fohl and Leon Larson (Trustees of Wilmington Cemetery Association) Abandoned	0.02 - 0.02	0.00

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES SEPTEMBER 1971

(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
Cluff, Ben Dairy		
Successor to Edward and Emily Cost	7.40	
Sold to American Plant Growers, Inc.	- 7.40	
		0.00
Coast Forest Products		
Successor to Southwest Steel Rolling Mills		
Successor to A. K. Wilson Lumber Company, a corporation		3.40
Callister, Cameron	136.82	
Quitclaimed to Normandie Park	-136.82	
		0.00
Columbia Broadcasting System, Inc.	18.50	
Sold to Ronald E. Moran	- 9.00	
		9.50
Cost, Edward and Emily	7.40	
Sold to Ben Cluff Dairy	- 7.40	
		0.00
Curtis, Owen W.	3.80	
Sold to Southern California Water Company	- 3.44	
		0.36
Del Amo Estate Company	121.00	
Sold to Dominguez Water Corporation	-121.00	
		0.00
Delaney, Golda, Estate of		
(Formerly Arthur J. Delaney)		
Successor to Bego Corporation		4.10
*Desser Enterprises		
Second West Coast Basin Judgment		0.00
Dominguez Estate Company	254.00	
Sold to Dominguez Water Corporation	-254.00	
		0.00
*Dominguez Water Corporation	9,477.80	
Successor to Carson Estate Company	130.00	
Successor to Don Wilson Builders		
Successors to Isamu, Kazuo and Yoshiki R. Kita		
Successors to Lathrop M. Ellinwood	32.60	
Successor to Del Amo Estate Company	121.00	
Successor to Dominguez Estate Company	254.00	
Successor in part to H. J. Early	91.00	
Successor to Jeanette R. Haydenbeck		
(Formerly Jeanette R. Reifsnnyder)	0.70	
Successor to Kikuno Nakano, et al.	19.30	
Successor to R. A. Watt, Incorporated		

**ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1971**

(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
*Dominguez Water Corporation (continued)		
Successor in part to Joughin Torrance Ranch		
Successor in part to Isabela J. Granz	55.35	
Successor to Ned Ewing, et al.		
Successor in part to Isabela J. Granz Estate	6.50	
Successor in part to Isabela J. Granz	- 37.60	
Sold to Watson Land Company		10,150.65
Don Wilson Builders		
Successors to Kasuo Isamu and Yoshiki R. Kita		
Successors to Lathrop M. Ellinwood	32.60	
Sold to Dominguez Water Corporation	- 32.60	0.00
Douglas Aircraft Company, Incorporated (See McDonnell Douglas Corp.)		
Draper, Charles L.		
Sold to Alcast Foundry, et al.	7.20	
	- 7.20	0.00
Early, H. J. and Daisy		
Sold to Dominguez Water Corporation	111.00	
Sold to Samuel R. and Raymond S. Fujimoto	- 91.00	
	- 20.00	0.00
Edison Securities Company (Now known as Associated Southern Investment Company)		
Ellinwood, Lathrop M.		
Sold to Isamu, Kasuo and Yoshiki R. Kita	32.60	
	- 32.60	0.00
*El Segundo, City of		
Engelsma, Jake		
Successor to Wilbur Hornstra	14.10	
Sold to Asahi Fancy Koi, Incorporated	- 2.00	12.10
Etchmendi, Caroline, Estate of		
		8.20
Ewing, Carmelita Rosecrans		
Sold to Southern California Water Company	91.30	
	- 91.30	0.00
Ewing, Ned et al.		
Successor in part to Isabel J. Granz Estate	6.50	
Sold to R. A. Watt, Incorporated	- 6.50	0.00

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1971
(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
Flesh, Leslie R. and Andor Pasternak, et al. Successors to Alfred D. and Ruth Seaback Sold to Stanley C. Lagerlof	3.50 - 3.50	0.00
* Fletcher Oil and Refining Company (formerly Fletcher Oil Company)		86.30
Fletcher, Robert G., Daniel S., and Wilfred O. Successor to Fred A. Jungquist (formerly Kathenne P. Woodman Jungquist)		3.70
Frogge, W. J. Sold to Sigmund S. and Lionel S. Hockwald	12.50 - 12.50	0.00
Fukuwa, Herbert Sakaye Doing business as Mayflower Nurseries		0.00
Fullilove, Robert L. Sold to State of California	1.00 - 1.00	0.00
Fujimoto, Samuel R. and Raymond S. Successor in part to H. J. and Daisy Early		20.00
Gerahue Land Company Successor and Assignee for A. S. Johnston Drilling Company Abandoned Water Right	11.90 - 11.90	0.00
*Gillingham, Florence R., et al.		2.40
* Gonzalez, Felipe and Gabriela		34.30
Grand Land Company Successor in part to Smith, A. H. (Sam Surber and Freda Smith) Abandoned Water Rights 1961-62	5.70 - 5.70	0.00
*Grant, John, Estate of		59.00
Granz, Isabela J. (Per Judgment) <u>Part tioned to heirs</u> Joughin Torrance Ranch Isabela J. Granz Estate Emma J. Osborn George R. Murdock <u>Subject to long term lease:</u> Standard Oil Company of California Superior Oil Company	380.00 - 212.42 - 33.80 - 32.66 - 15.12 (59.60) (26.40)	
		86.00

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1971
(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
Granz, Isabela J., Estate of		
Successor in part to Isabela J. Granz	33.80	
Sold in part to Ned Ewing, et al.	- 6.50	
Sold in part to R. A. Watt, Incorporated	- 13.75	
Sold in part to Richard Barclay and R. A. Watt	<u>- 13.55</u>	
		0.00
*Harris, R. and L.		
Successor to Lawrence I. Liston	0.70	
Disclaimed Water Right	<u>- 0.70</u>	
		0.00
*Harris Tube, Incorporated		
Successor in part to B. Robinson and Associates		
Successors in part to James K. Lawler's Estate		0.70
Hawthorne, City of		1,882.00
Henderson, Beatrice M.	1.30	
Abandoned Water Right	<u>- 1.30</u>	
		0.00
Heydenbeck, Jeanette R.		
(Formerly Jeanette R. Reifsnnyder)	0.70	
Sold to Dominguez Water Corporation	<u>- 0.70</u>	
		0.00
*Hillside Memorial Park	16.70	
Successor to Sigmund S. and Lionel S. Hockwald		
Successors to W. J. Frogge	<u>12.50</u>	
		29.20
Hockwald, Sigmund S. and Lionel S.		
Successor to W. J. Frogge	12.50	
Sold to Hillside Memorial Park	<u>- 12.50</u>	
		0.00
*Hollywood Turf Club		282.00
Hornstra, Wilbur	14.10	
Sold to Jake Engelsma	<u>- 14.10</u>	
		0.00
Hunt, Donald G.		
Successor to James Scanda	1.90	
Sold to Kenichi Inose	<u>- 1.90</u>	
		0.00
*Industrial Chemical Division, Allied Chemical Corporation		255.00
(Formerly Allied Chemical Corporation, General Chemical Company)		

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1971
(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
Inglewood, City of	4,382.00	
Successor to Frank Abell	1.80	
Successor in part to George R. Murdock		
Successor in part to Isabela J. Granz	1.37	
	<hr/>	4,385.17
*Inose, Kenichi		
Successor to Donald G. Hunt		
Successor to James Slanda and George Nassim	1.90	
Successor to Baxter, Ralph and Lois A. LeNon	3.50	
	<hr/>	5.40
Isamu, Kasuo and Yoshiki R. Kita		
Successor to Lathrop M. Ellinwood	32.60	
Sold to Don Wilson Builders	- 32.60	
	<hr/>	0.00
*Ishibashi, Aki		
Successor to Alice M. Ueda, listed in Second West Coast Basin Judgment		0.00
Jenkins, Harry C.		
Successor to H. L. Perry		
Successor to Mrs. Zoraida Parke	1.80	
Sold to ABC Nursery Incorporated	- 1.80	
	<hr/>	0.00
*Johns-Manville Products Corporation		881.00
Johnson, C. F.	12.20	
Transferred to Kaoru and Satoru Wada	- 12.20	
	<hr/>	0.00
Johnston, A. S., Drilling Company	11.90	
Assigned to Gerahue Land Company	- 11.90	
	<hr/>	0.00
Jones, Anna Mae	50.20	
Sold to City of Torrance	- 50.20	
	<hr/>	0.00
Joughin Torrance Ranch		
Successor in part to Isabela J. Granz	212.42	
Sold in part to Normandie Park via Cameron Collister	- 136.82	
Sold in part to R. A. Watt, Incorporated	- 55.35	
Sold in part to Boise Cascade Building Company	- 16.92	
	<hr/>	3.33
Jungquist, Fred A.		
(Formerly Katherine P. Woodman Jungquist)	3.70	
Sold to Robert G., Daniel S., and Wilfred D. Fletcher	- 3.70	
	<hr/>	0.00
Kahlert, et al		
Successor in part to Kelly Pipe Company	18.90	
Sold to Sparkletts Drinking Water Corporation	- 18.90	
	<hr/>	0.00

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1971
(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
Kelly Pipe Company	49.00	
Sold in part to State of California	- 16.30	
Sold in part to Kahlert, et al.	- 18.90	
Sold in part to Sparkletts Drinking Water Corporation	- 13.80	
	<hr/>	0.00
Kurtz, Gladys	3.50	
Sold to Sparkletts Drinking Water Corporation	- 3.50	
	<hr/>	0.00
Lawler, James K.	3.10	
Sold to B. Robinson and Associates	- 3.10	
	<hr/>	0.00
Lagerlof, Stanley C.		0.00
Successor to Leslie R. Flesh and Andor Pasternak, et. al		3.50
*Lermens, Alfred		0.70
Leuzinger, Emma L.		1.40
Liston, Lawrence	0.70	
Sold to R. and L. Harris	- 0.70	
	<hr/>	0.00
Long Beach, City of		0.70
Lopes, Frank		3.70
Los Angeles, City of		1,503.00
*Los Angeles County—Alondra Park	28.70	
Successor to Los Angeles County Flood Control District	37.60	
Successor in part to A. H. Smith and Sam Serber, et al.	1.40	
	<hr/>	67.70
Los Angeles County Flood Control District	37.60	
Successor in part to A. H. Smith, et al	1.40	
Sold to Los Angeles County — Alondra Park	- 39.00	
	<hr/>	0.00
*Los Angeles County Sanitation District No. 2		102.00
*Los Angeles County Waterworks District No. 13		1,352.00
*Los Angeles County Waterworks District No. 22		551.00
*Los Angeles County—Western Avenue Golf Course		296.00
Second West Coast Basin Judgment listed as Board of Retirement of the Los Angeles County Employees Retirement System.		
*Loyola University of Los Angeles		48.10

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1971
(Continued)

<u>Party</u>	<u>Adjudicated Right, in acre-feet per year</u>
*Manhattan Beach, City of	1,131.20
*Mayflower Nurseries (See Herbert Sakaye Fukuwa)	0.00
McCandless, James Sold to Sparkletts Drinking Water Corporation	6.70 - 6.70 <hr/> 0.00
McDonnell Douglas Corporation (Formerly Douglas Aircraft Company, Incorporated) Lease from United States Navy Department Successor to Aluminum Company of America	1.70
Mobil Oil Corporation (Formerly Socony Mobil Oil Company)	2,570.00
Moneta Mutual Water Company Sold to City of Torrance	916.00 -9 16.00 <hr/> 0.00
Moniz, Joe, Jr. Sold to State of California	2.20 - 2.20 <hr/> 0.00
Moran, Ronald E. Successor in part to Columbia Broadcasting System, Incorporated Sold to City of Torrance	9.00 - 9.00 <hr/> 0.00
*Mori, Roy H. and Kinji Second West Coast Basin Judgment	5.60
Murdock, George R. Successor in part to Isabela J. Granz Sold in part to R. Barclay and R. A. Watt Sold in part to City of Inglewood	15.12 - 13.75 - 1.37 <hr/> 0.00
Nakano, Kikuno, et al. Sold to Dominguez Water Corporation	19.30 -19.30 <hr/> 0.00
Navarro, T. C. Sold to Hilario S. and Emma Alweg	53.90 -53.90 <hr/> 0.00
Norair, A Division of Northrop Corporation (Formerly known as Northrop Aircraft, Inc.)	38.15
Normandie Park Successor to Joughin Torrance Ranch via Cameron Collister Successor in part to Isabela J. Granz Sold to City of Torrance	136.82 -136.82 <hr/> 0.00

**ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1971
(Continued)**

<u>Party</u>	<u>Adjudicated Right, in acre-feet per year</u>
Osborn, Emma J.	
Successor in part to Isabela J. Granz	32.66
Sold to R. Barclay and R. A. Watt	<u>-32.66</u>
	0.00
*Otani, Chisato	0.00
Pacific Crest Cemetery Company	17.70
Successor to H. S. Scott	
Successor to W. F. Burke	9.50
Successor to Wada, Kaoru and Satoru	
Successor to C. F. Johnson	<u>12.20</u>
	39.40
*Palos Verdes Begonia Farm	0.00
Successor to Gus A. Bauman	
*Palos Verdes Water Company	999.00
*Park Water Company	160.00
Parke, Zoraida	1.80
Sold to H. L. Perry	<u>- 1.80</u>
	0.00
Paschke, William Joseph	0.02
Abandoned Water Right	<u>- 0.02</u>
	0.00
Perry, H. L.	
Successor to Zoraida Parke	1.80
Sold to Harry C. Jenkins	<u>- 1.80</u>
	0.00
*Phillips Petroleum Company	167.00
(Formerly Tidewater Oil Company)	
Rehor, Josephine P.	2.20
Reifsnnyder, Jeanette R.	
(Now known as Jeanette R. Heydenbeck)	
Richfield Oil Corporation	
(Now known as Atlantic Richfield Company)	
Robinson, B., and Associates	
Successor to James K. Lawler	3.10
Sold in part to Harris Tube, Incorporated	<u>- 0.70</u>
Sold in part to Southern California Water Company	<u>- 2.40</u>
	0.00
Rockwell, Michael L.	
Successor to Bank of America National Trust and Savings Association	0.10
(Trust B 1-51)	

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1971
(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
Rodriguez, Flavio	6.10	
Sold to State of California	- 4.00	
Disclaimed Water Right	<u>-2.10</u>	
		0.00
*Roman Catholic Archbishop of Los Angeles		72.30
(Holy Cross Cemetery)		
Ruffner Corporation		
Successor to Louis M. Sepulveda	0.70	
Abandoned Water Right	<u>-0.70</u>	
		0.00
Ryan Aeronautical Company	20.20	
Sold to Southern California Water Company	<u>-20.20</u>	
		0.00
*Santa Fe Land Improvement Company		39.50
Scanda, James and George Nassin	1.90	
Sold to Donald G. Hunt	<u>- 1.90</u>	
		0.00
Schlaegel, Keith W. and Opal B.	13.60	
Sold to Sidney R. and Charlotte W. Title	<u>- 13.60</u>	
		0.00
Scott, H. S.		
Successor to W. F. Burke and Lois Price	9.50	
Quitclaimed to Pacific Crest Cemetery Company	<u>- 9.50</u>	
		0.00
Seaback, Alfred D. and Ruth	3.50	
Sold to Leslie R. Flesch and Andor Pasternak, et al.	<u>-3.50</u>	
		0.00
Sepulveda, Louis M.	0.70	
Acquired by Ruffner Corporation	<u>-0.70</u>	
		0.00
*Sheets, Esther M.		5.50
(Formerly Clyde L. Sheets)		
*Shall Oil Company		4,516.00
*Shinoda Brothers, Incorporated		22.50
Second West Coast Basin Judgment		
Smith, A. H., (Sam Surber and Freda Smith)	9.70	
Sold in part to L. A. Co. Flood Control District	-1.40	
Sold in part to State of California	-2.60	
Sold in part to Grand Land Company	<u>- 5.70</u>	
		0.00

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1971
(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
Socony Mobil Oil Company (See Mobil Oil Company)		
*Southern California Edison Company	10.40	
Successor to Associated Southern Investment Company	<u>46.70</u>	57.10
Southern California Water Company	6,265.30	
Successor in part to B. Robinson and Associates		
Successor in part to James K. Lawler's Estate	2.40	
Successor in part to Owen W. Curtis	3.44	
Successor to C. F. and W. S. Rosecrans listed as Carmelita Rosecrans Ewing	91.30	
Successor to Ryan Aeronautical Company	20.20	
Successor to Southern Pacific Company	<u>166.00</u>	6,548.64
Southern Pacific Company	166.00	
Sold to So. California Water Company	<u>- 166.00</u>	0.00
Southwest Steel Rolling Mills		
Successor to A. K. Wilson Lumber Company	3.40	
Sold to Coast Forest Products	<u>- 3.40</u>	0.00
Southwestern Portland Cement Company	15.00	
Sold to Chandler's Palos Verdes Sand & Gravel Corporation	<u>- 15.00</u>	0.00
Spanish American Institute		44.40
Sparkletts Drinking Water Corporation		
Successor to Rembert C. Anderson, et al.	80.50	
Successor to State of California		
Successor to:		
Robert L. Fullilove	1.00	
Kelly Pipe Company (part only)	16.30	
Joe Moniz, Jr.	2.20	
Flavio Rodriguez (part only)	4.00	
A. H. Smith (Sam Surber and Freda Smith) (part only)	2.60	
Successor to Kahlert, et al.		
Successors in part to Kelly Pipe Company	18.90	
Successor in part to Kelly Pipe Company	13.80	
Successor to Gladys Kurtz	3.50	
Successor to James McCandless	6.70	
Successor to Wechsler, B. A.		
Successor to Mates Tune, et al.		
Successors to Josephine Watkinson	<u>3.10</u>	152.60
*Standard Oil Company of California		4,541.70
*Stauffer Chemical Company		521.00
Superior Oil Company		0.00
Swick, Peggy	5.50	
Sold to Hilario and Emma Alwag	<u>- 5.50</u>	0.00

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1971
(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
Texaco, Inc.		3,432.00
Thaxter, Ralph and Lois A. LeNoir	3.50	
Sold to Kenichi Inose	<u>- 3.50</u>	0.00
Title, Sidney R. and Charlotte W.		
Successor to Keith W. and Opal B. Schlaegel	13.60	
Sold to ABC Nursery, Incorporated	<u>-13.60</u>	0.00
*Torrance, City of	2,519.00	
Successor to Alcast Foundry, et al		
Successor to Chas. L. Draper, et al.	7.20	
Successor to Richard Barclay and R. A. Watt		
Successors in part to Isabela J. Granz Estate	13.55	
Successors in part to George R. Murdock	13.75	
Successors to Emma Osborn	32.66	
(All three above are successors in part to Isabela J. Granz)		
Successor to Belvidere Mutual Water Company	33.40	
Successor to Anna Mae Jones	50.20	
Successor to Moneta Water Company	916.00	
Successor to Ronald E. Moran		
Successor in part to Columbia Broadcasting System, Incorporated	9.00	
Successor to Normandie Park		
Successor in part to Joughin Torrance Ranch via Cameron Collister		
Successor in part to Isabela J. Granz	136.82	
Successor to Torrance Unified School District		
Successor to Hilario S. and Emma Alwag		
Successors to T. C. Navarro	53.90	
Successor to Peggy Swick	5.50	
Successor to R. A. Watt, Incorporated		
Successor in part to Isabela J. Granz Estate		
Successor in part to Isabela J. Granz	<u>13.75</u>	3,804.73
Torrance Sand and Gravel Corporation		
Successor to Weston Investment Company	184.00	
Sold to Chandler's Palos Verdes Sand and Gravel Corporation	<u>- 184.00</u>	0.00
Torrance Unified School District		
Successor to Hilario S. and Emma Alwag		
Successor to Peggy Swick	59.40	
Sold to City of Torrance	<u>- 59.40</u>	0.00
Tune, Mates, et al.		
Successor to Josephine Watkinson	3.10	
Sold to B. A. Wechsler	<u>3.10</u>	0.00
*Union Nursery, Incorporated		4.70
Second West Coast Basin Judgment		
*Union Oil Company of California		2,670.00

ADJUDICATED RIGHT OF WEST COAST BASIN PARTIES
SEPTEMBER 1971
(Continued)

<u>Party</u>		<u>Adjudicated Right, in acre-feet per year</u>
*United States Steel Corporation		1,791.00
Verburg, William and Clara B.	6.70	
Sold to ABC Nursery, Incorporated	<u>6.70</u>	
		0.00
Wada, Kaoru and Satoru		
Transferred from C. F. Johnson	12.20	
Sold to Pacific Crest Cemetery Company	<u>12.20</u>	
		0.00
Watkinson, Josephine	3.10	
Sold to Mates Tune, et al.	<u>3.10</u>	
		0.00
*Watson Land Company	42.60	
Successor in part to Dominguez Water Corporation	<u>37.60</u>	
		80.20
Watt, R. A., Incorporated		
Successor in part to Joughin Torrance Ranch		
Successor in part to Isabela J. Granz	55.35	
Successor to Ned Ewing, et al.		
Successor in part to Isabela J. Granz Estate		
Successor in part to Isabela J. Granz	6.50	
Successor in part to Isabela J. Granz Estate		
Successor in part to Isabela J. Granz	13.75	
Sold to City of Torrance	<u>13.75</u>	
Sold to Dominguez Water Corporation	<u>61.85</u>	
		0.00
Wechsler, B. A.		
Successor to Mates Tune, et al		
Successor to Josephine Watkinson	3.10	
Sold to Sparkletts Drinking Water Corporation	<u>3.10</u>	
		0.00
Weston Investment Company	184.00	
Sold to Torrance Sand and Gravel Corporation	<u>184.00</u>	
		0.00
Wilson, A. K., Lumber Company	3.40	
Sold to Southwest Steel Rolling Mills	<u>3.40</u>	
		0.00
*Wiseburn School District		8.20
Woodman, Katherine P.		
(See Fred A. Jugquist)		
*Ziegler, Maxwell T.		0.00
Total		<u>64,468.25</u>

*
Members of "Exchange Pool" as of September 30, 1971, pursuant to paragraph VII of the Judgment.

WATER BILL: LICENSE AND AGREEMENT

Said License is granted, subject to the following conditions:

- CALIFORNIA WATER SERVICE COMPANY warrants that it has it is not
20 acre-feet of Adjudicated Right and that it has not pumped and will not
pump or permit or license any other person to pump any part of said 20
acre-feet during period of October 1, 1970 through September 30, 1971

CALIFORNIA WATER SERVICE COMPANY

AMERICAN PLANT GENETICS, INC.

~~Am. Ethn.~~

1841

Q. 1.1.1. A

Griffiths

July 1919

謝曉(王世元攝)

LEASL OF WATER RIGHTS

This LEASE made and entered into this 27th day of October, 1970 by and between DOMINION WATER CORPORATION, a California corporation of 2128 N. 1st Street, Long Beach, California 90801 hereinafter referred to as "Lessor" and ATLANTIC RICHFIELD COMPANY, a corporation, of 445 South Figueroa Street, Los Angeles, California 90017 hereinafter referred to as "Lessee".

WITNESSETH

WHEREAS, Lessor is the owner of the right to annually take produce and withdraw from the ground water basin in Los Angeles County, California, commonly known as the "West Coast Basin", approximately 10,150 to 65 acre feet of water per year, and

WHEREAS, Lessee desires to obtain 1 000 acre feet of ground water
for use in its Wilson Refinery, and

WHEREAS it is not possible for Lessor to deliver ground water to Lessee through existing distribution facilities;

NOW, THEREFORE, IT IS MUTUALLY AGREED BY AND BETWEEN
THE PARTIES HERETO AS FOLLOWS

For and in consideration of the covenants and agreements hereinafter recited, Lessor does hereby lease (a) his and, during the term hereof assigned, to Lessee for the period beginning October 1, 1970 and terminating September 30, 1971, a .000 acre fee of Lessor's total right to withdraw and devote to beneficial use water from the West Coast Basin. Said leased right to be exercised by Lessee withdrawing 81-1/3 acre feet of water each and every month from said Basin for the term of the Lease.

1.000000000

1. Pay to Lessor the sum of \$41,400 in twelve (12) equal, monthly

payroll = \$5000 (rate = 10% rule = \$5000 * 0.10 = \$500)

Pay = 0.14 to the extent of West Basin Water Replenish

District any and all assessments levied by the District on the waters produced hereunder by Lessee.

3. Reimburses Lessor for any and all additional taxes which may be levied on the value of water rights issued hereunder which taxes would not otherwise have been levied excepting for this lease.

4. Prepare and file all necessary reports and documents in connection with the water right leased herein, required by the Central and West Basin Water Replenishment District, and furnish copies thereof to Lessor.

5. Make all necessary filings with the State Water Rights Board in connection with the waters produced by a lease hereunder, as provided in part 5 of Division 2 [Sections 498 et seq.] of the Water Code of the State of California, as amended, and prepare and file any and all other reports, filings or the like as may be required, during the term hereof, from time to time by proper authority in connection with the rights leased hereunder, and furnish copies thereof to Lessee.

c. Prepare and file all other reports, documents and papers necessary for the preservation of Lessor's water rights hereby leased, and furnish copies thereof to Lessor.

All notices, bills, demands or communications from one party to the other hereunder shall be in writing, and shall be deemed sufficiently served given or made by depositing the same in the United States mail addressed to the respective parties at the addresses hereinafter set forth or at such other addresses either party from time to time may specify by written notice.

This Lease and all of the rights and obligations herein contained, shall be binding upon and inure to the benefit of the respective successors and assigns of the parties hereto.

This Lease shall at all times be subject to such changes or modifications by the Public Utilities Commission of the State of California as said Commission may from time to time direct in the exercise of its jurisdiction.

It is the understanding of the parties hereto that this Lease shall not become effective until the authorization of the Public Utilities Commission of the State of California has been first obtained.

IN WITNESS WHEREOF, the parties hereto have caused this Lease to be executed in several counterparts each of which shall be deemed an original, by their respective officers duly authorized, and their corporate seals to be hereunto affixed, as of the day and year first above mentioned.

DOMINGUEZ WATER CORPORATION

By *Wm. A. ...*

(CORPORATE SEAL)

By Allen J. Gurnea

ATLANTIC RICHFIELD COMPANY

By J. M. L.

(CORPORATE SEAL)

By _____

36

AGREEMENT OF LEASE AND TRANSFER OF WATER RIGHTS

THIS AGREEMENT made and entered into as of the first day of October, 1970, by and between the CITY OF EL SEGUNDO, a general law city of the State of California, hereinafter referred to as "City", and ATLANTIC RICHFIELD COMPANY, a Pennsylvania corporation, hereinafter referred to as "Atlantic Richfield".

WITNESSETH:

That the parties hereto do mutually agree as follows:

The City hereby leases and transfers to Atlantic Richfield for and during a period of one (1) year commencing with the date hereof and continuing to and including September 30, 1971, water rights consisting of the right annually to pump nine hundred (900) acre feet of water for and during said period from the West Coast Basin, being the ground water basin within the West Basin Water Replenishment District, in the State of California.

Atlantic Richfield shall pay to City a rental of Twenty Nine and No/100 Dollars (\$29.00) per acre foot for the water rights leased and transferred hereunder.

Subject to the limitation hereinafter imposed the total quantity of water which Atlantic Richfield shall be entitled to pump as a result of this lease and transfer is nine hundred (900) acre feet and the total consideration therefor, computed on the basis of said rental of Twenty Nine and No/100 Dollars (\$29.00) per acre foot, is Twenty Six Thousand One Hundred Dollars (\$26,100.00) which shall be paid to City in twelve (12) equal monthly installments of Two Thousand One Hundred Seventy Five and No/100 Dollars (\$2,175.00) beginning on the fifteenth day of November, 1970, and continuing on the fifteenth day of each month thereafter for a period of one (1) year.

Notwithstanding the foregoing lease and transfer of City's water rights, it is mutually agreed between the parties that City may at any time without prior

-1-

notification or approval of Atlantic Richfield, pump any portion of said nine hundred (900) acre feet of water at any time that City determines that an emergency requires the use of such water by the City of El Segundo. Immediately following any such pumping by the City, City shall notify Atlantic Richfield of the quantities pumped so that appropriate allocation may be made in reports required by law.

City represents and warrants that it owns said water rights leased and transferred hereunder, and that City has a right to pump said nine hundred (900) acre feet of water for and during said period, and that City has the full right to lease and transfer to Atlantic Richfield said water rights and the right to pump said nine hundred (900) acre feet of water during said period.

Dated this 23rd day of November, 1970,

CITY OF EL SEGUNDO

By *[Signature]*
Mayor

ATTEST:

By *[Signature]*
City Clerk

(SEAL)

ATLANTIC RICHFIELD COMPANY

By *[Signature]*
Vice-President
Title

(SEAL)

-2-

MUTUALITY AGREEMENT FOR
LEASE OF WATER RIGHTS

THIS AGREEMENT amends and modifies that certain agreement entered into on the 2nd day of April, 1965, by and between the CITY OF MANHATTAN BEACH, hereinafter referred to as "CITY" and ATLANTIC RICHFIELD COMPANY (formerly known as Richfield Oil Corporation), hereinafter referred to as "ARCO" City and ARCO agree that the agreement of April 2, 1965 is amended and modified as follows:

Paragraph 2 of said agreement shall be modified to provide as follows:

"The term of said agreement shall be extended for a period of sixteen (16) months or to January 31, 1972, provided, however, City shall reserve the right to cancel said agreement upon giving sixty (60) days prior written notice to ARCO."

Paragraph 4 of said agreement shall be modified to provide as follows:

"During the extended term of this agreement, ARCO shall be permitted to pump at the rate of 91.86 acre feet per month, commencing September 1, 1970."

Paragraph 5 of said agreement shall be modified to provide as follows:

"During the extended term of said agreement the price to be paid to City shall be Twenty Nine (\$29.00) Dollars per acre foot."

Except as specifically amended or modified herein, all of the remaining terms and conditions of the agreement of April 2, 1965 shall remain in full force and effect.

IN WITNESS WHEREOF, the City has by action of its City Council authorized this agreement to be executed for and

1

on behalf of the City by its Mayor and attested by its City Clerk, and ARCO has caused the same to be executed by its duly authorized officer.

Dated this 18th day of August, 1970.

CITY OF MANHATTAN BEACH

By *[Signature]*
Mayor

ATTEST

(SEAL)

HERMAN R. BRANDT, City Clerk

By *[Signature]*
Deputy

ATLANTIC RICHFIELD COMPANY

By *[Signature]*
Vice-President

(CORPORATE SEAL)

and

By *[Signature]*
Its

2

STANDARD OIL COMPANY OF CALIFORNIA, Western Operations, Inc., hereinafter referred to as "STANDARD," hereby leases and transfers to ATLANTIC RICHFIELD COMPANY, hereinafter referred to as "Atlantic Richfield," commencing the period commencing with the date hereof and continuing to and including September 30, 1971, hereinafter referred to as "said period" water rights consisting of the right to pump thirty one hundred (3100) acre feet of water during said period from the West Coast Basin, being a ground water basin within the Central and West Basin Water Replenishment District, in the State of California.

Atlantic Richfield shall pay to Standard a rental of Twenty-Nine Dollars (\$29.00) per acre foot for the water rights leased and transferred hereunder.

The total quantity of water which Atlantic Richfield shall be entitled to pump as a result of this lease and transfer is thirty one hundred (3100) acre feet and a total consideration therefor, computed on the basis of said rental of Twenty Nine Dollars (\$29.00) per acre foot is Eighty-Nine Thousand Nine Hundred Dollars (\$89,000), which consideration shall be paid to Standard by Atlantic Richfield in three or more installments as follows:

Atlantic Richfield shall pay all of the assessments levied by the Central and West Basin Replenishment District on all of said thirty one hundred (3100) acre feet of water, the rights in which are leased and transferred to Atlantic Richfield hereunder, during said period.

Standard agrees not to pump water from said West Coast Basin during said period in a quantity which would reduce its water rights in the said West Coast Basin to less than thirty one hundred (3100) acre feet.

Standard represents and warrants that it owns (and agrees to indemnify Atlantic Richfield against any claims by others to) said water rights leased and transferred hereunder, and that Standard has no right to lease and transfer said thirty one hundred (3100) acre feet of water for and during said period, and that Standard has the full right, without further authorization or approval of any governmental authority or agency, to lease and transfer to Atlantic Richfield said water rights and the right to pump said thirty one hundred (3100) acre feet of water during said period.

Dated this 12th day of October, 1970.

STANDARD OIL COMPANY OF CALIFORNIA
WESTERN OPERATIONS, INC.

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

By [Signature]
Vice-President

THIS LEASE, made and entered into as of the 1st day of October, 1970, by and between CARSON-MADRONE COMPANY, a partnership consisting of GUILFORD GLAZER and GREAT LAKES PROPERTIES, INC., a Delaware corporation, of 21515 Hawthorne Boulevard, Torrance, California hereinafter referred to as "Lessor" and DOMINGUEZ WATER CORPORATION, a California corporation, of 21728 South Alameda Street, Long Beach, California 90801, hereinafter referred to as "Lessee".

WITNESSETH

WHEREAS, Lessor is the owner of the right to annually take, produce and withdraw from the ground water basin in Los Angeles County, California commonly known as the "West Coast Basin", approximately 104 acre feet of water per year and

WHEREAS, Lessee desires to avail itself of the rights of Lessor within West Coast Basin during the water year ending September 30, 1971 and Lessee is willing to allow Lessee to pump Lessor's water right within West Coast Basin, in an amount of 104 acre feet, during the 1970-71 water year, ending September 30, 1971, subject to the terms and conditions hereinafter set forth.

NOW, THEREFORE, IT IS MUTUALLY AGREED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS

For and in consideration of the covenants and agreement hereinafter mentioned, Lessor does hereby lease, let, hire to, and, during the term hereof, assign to Lessee for the water year October 1, 1970 through September 30, 1971, Lessor's right to withdraw from said West Coast Basin 104 acre feet of water, together with Lessor's right to devote said water to

beneficial uses

Lessee shall:

1. Pay to Lessor the sum of \$2,600.00 (being \$25.00 per acre foot of water leased and assigned hereunder). Said sum to be payable March 1, 1971.
2. Pay directly to the Central and West Basin Water Replenishment District any and all pump assessments and any and all other charges levied on the waters produced hereunder by Lessee.
3. Pay all power costs and other production costs in connection with the production of the water referred to herein.
4. Prepare and file all necessary reports and documents in connection with the water rights leased herein, required by the Central and West Basin Water Replenishment District.
5. Make the necessary filings with the State Water Rights Board, in connection with the waters produced by Lessee hereunder, as provided in part 5 of Division 2 (Sections 4994 et seq.) of the Water Code of the State of California, as amended, and prepare and file any other reports, filings or the like as may be required, during the term hereof, from time to time by proper authority, in connection with the rights leased hereunder.
6. Prepare, file and furnish a copy to Lessor of all reports, documents and papers necessary and advisable for the preservation of Lessor's water rights hereby leased, without cost to Lessor.

All notices, bills, demands or communications from one party to the other hereunder shall be in writing and shall be deemed sufficiently served, given or made by depositing the same in the United States mail in any branch or main post office in the State of California postage prepaid, addressed to the respective party at the address hereinabove and recites

WATER RIGHTS LICENSE

For a valuable consideration, UNION OIL COMPANY OF CALIFORNIA, a corporation (Union), hereby grants to ATLANTIC RICHFIELD COMPANY, a corporation (Licensee), a license to extract, during the period beginning October 1, 1970 and ending September 30, 1971, 800 acre-feet of the 2670 acre-feet of Adjudicated Right owned by Union under and pursuant to the provisions of the Judgment dated August 18, 1941, and entered in Los Angeles County Superior Court Case No. 308,406, entitled "California Water Service Company, et al., vs. City of Compton, et al."

This license shall be subject to the following conditions:

1. Licensee shall exercise this license and shall extract the aforesaid 800 acre-feet of Adjudicated Right on behalf of Union during the above specified period and shall put the same to beneficial use and Licensee shall not by the exercise hereunder of Union's right acquire any right to extract water independent of the rights of Union.
2. Licensee shall keep and maintain accurate records of its ground water extractions made hereunder and shall report the same to the Central and West Basin Water Replenishment District, to the court-appointed Watermaster, being the Department of Water Resources of the State of California, and to Union.
3. Licensee shall notify the District and the Watermaster that such ground water extraction was made pursuant to the provisions of this license agreement; a copy of which shall be provided to the Watermaster by Union.
4. Licensee shall pay to the District all ground water replenishment assessments levied by the District on the quantity of ground water extracted by Licensee hereunder.

Union warrants that it owns the aforesaid 800 acre-feet of Adjudicated Right and that the same has not been nor shall it be ascertained by Union or by any other party under authority granted by Union, during the period beginning October 1, 1970 and ending September 30, 1971.

DATED: October 12, 1970

UNION OIL COMPANY OF CALIFORNIA
By [Signature]
Fred W. Anderson, President
Corporate Seal State

ATLANTIC RICHFIELD COMPANY
By [Signature]
Vice President

hereof set forth or at such other address either party hereto may specify by written notice given to the other

This Lease, and all of the rights and obligations herein contained, shall bind and inure to the benefit of the respective successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have caused this Lease to be executed in duplicate, each of which shall be deemed an original, by their respective officers, duly authorized and their corporate seals to be hereunto affixed, at Los Angeles, California, as of the day and year first above mentioned.

CARSON-MADRONA COMPANY
a partnership
Carson-Madrona Co.
Charles C. Carson, partner
Great Lakes Properties, Inc., partner

(CORPORATE SEAL)

By *Domínguez*
DOMINGUEZ WATER CORPORATION

By *Domínguez*
President

(CORPORATE SEAL)

By *Domínguez*
Secretary

-3-

WATER RIGHT LICENSE AND AGREEMENT

For a valuable consideration, UNION BANK, TRUSTEE OF THE ESTATE OF CAROLINE ETCHEMENY, hereby grants to DOMINGUEZ WATER CORPORATION, a California corporation, a license to extract annually 8.2 acre feet of license's Adjudicated Right allocated to Licensor (or predecessors in interest) under and pursuant to Judgment dated August 18, 1961 and entered in Los Angeles Superior Court Case No. 506806 entitled "California Water Service Company, et al. vs. City of Compton, et al." during the period commencing October 1, 1970 and continuing to and including September 30, 1972.

Said License is granted, subject to the following conditions:

- (1) Licensee shall exercise said right and extract the same on behalf of UNION BANK, TRUSTEE OF THE ESTATE OF CAROLINE ETCHEMENY during the period above specified and put the same to beneficial use and licensees shall not be the exercise hereunder of said right acquire any right to extract water independent of the rights of Licensor.
- (2) Licensee shall pay assessments levied on the pumping of said ground waters by the Central and West Basin Water Replenishment District.
- (3) Licensee shall notify the District and the Watermaster that said pumping was done pursuant to this license and provide the Watermaster with a copy of this document.
- (4) Licensee shall note, in any recording of water production for the period of agreement, that said pumping was done pursuant to this license.

UNION BANK, TRUSTEE OF THE ESTATE OF CAROLINE ETCHEMENY, warrants that it has 8.2 acre feet of Adjudicated Right and that it has not pumped and will not pump or permit or license any other person to pump any part of said 8.2 acre feet during the two annual terms commencing on October 1, 1970 through September 30, 1972.

Dated July 23, 1971

UNION BANK, TRUSTEE OF THE ESTATE OF CAROLINE ETCHEMENY

By *John D. Riebel*
Title *Vice President*

DOMINGUEZ WATER CORPORATION

By *Shirley C. Bates*
Title Secretary

WATER RIGHT LICENSE AND AGREEMENT

FOR A VALUABLE CONSIDERATION, COLUMBIA BROADCASTING SYSTEM, INC. hereby grants to DOMINGUEZ WATER CORPORATION, a license to extract 9.50 acre feet of Licensor's Adjudicated Right allocated to Licensor (or predecessors in interest) under and pursuant to Judgment dated August 18, 1961 and entered in Los Angeles Superior Court Case No. 506806 entitled "California Water Service Company, et al. vs. City of Compton, et al." during the period commencing October 1, 1970 and continuing to and including September 30, 1975.

Said License is granted, subject to the following conditions:

1. Licensee shall exercise said right and extract the same on behalf of COLUMBIA BROADCASTING SYSTEM, INC. during the period above specified and put the same to beneficial use and Licensee shall not by the exercise hereunder of said right acquire any right to extract water independent of the rights of Licensor.
2. Licensee shall pay assessments levied on the pumping of said ground waters by the Central and West Basin Water Replenishment District.
3. Licensee shall notify the District and the Watermaster that said pumping was done pursuant to this License and provide the Watermaster with a copy of this document.
4. Licensee shall note in any recording of water production for the period of agreement, that said pumping

- 1 -

was done pursuant to this license

Licensee shall pay all power costs and other production costs incurred with respect to the production of water hereunder

The period set forth above in this Agreement shall consist of five annual terms, each term commencing on October 1 and ending on September 30 of the next succeeding year. Either Licensee or Licensor may terminate this Agreement at the end of any term by giving written notice to the other on or before September 1 of such term and said written notice shall be effective on September 30 of such term.

COLUMBIA BROADCASTING SYSTEM, INC. warrants that it has 9.50 acre feet of Adjudicated Right and that it has not pumped and will not pump or permit or license any other person to pump any part of said 9.50 acre feet during the period of October 1, 1970 through September 30, 1975 unless this Agreement is sooner terminated as herein provided.

Dated July 23, 1971 as of October 1, 1970

COLUMBIA BROADCASTING SYSTEM, INC.

By *Charles S. Hopper* *President*
By *Charles S. Hopper* *Assistant Secretary*

DOMINGUEZ WATER CORPORATION

By *Domínguez*
By *Domínguez* *Assistant Secretary*

- 2 -

LEASE D: WAT. RIGHTS

THIS LEASE is entered into on the 17th day of September, 1971, by and between DOMINGUEZ WATER CORPORATION, a corporation, hereinafter DOMINGUEZ, and STANLEY C. LACERLOF, an individual, hereinafter LACERLOF.

For and in consideration of the mutual undertakings and obligations of the parties as hereinafter set forth, and for other valuable consideration, the parties hereto agree as follows:

1. LACERLOF has acquired the right to produce, extract and withdraw 3.5 acre feet of water per annum from the West Coast Basin, as said basin is described in the Judgment in Los Angeles Superior Court Case No. 300,805, entitled "California Water Service Company, et al, vs. City of Compton, et al".

2. LACERLOF also has a carry-over right of 2 acre feet. LACERLOF hereby leases to DOMINGUEZ and DOMINGUEZ hereby accepts from LACERLOF 3.5 acre feet of right, together with the carry-over right of 2 acre feet.

3. The term of this lease shall commence on the date of this lease and continue to and including September 30, 1971.

4. DOMINGUEZ shall pay to LACERLOF the sum of \$137.50 on or before October 30, 1971.

5. DOMINGUEZ shall pay, before delinquency, all pumping assessments levied by the Central and West Basin Water Replenishment District on LACERLOF's said water rights.

6. DOMINGUEZ shall exercise all of the rights

herein, hereinafter and shall produce and deliver to LACERLOF and shall put the same to use as follows on or before September 30, 1971.

7. Each party agrees that of the quantity extracted between the date of this lease and the end of the 1970-71 water year from the basin in which said rights were leased to DOMINGUEZ, 7.5 acre feet of said quantity shall be deemed to be pursuant to and in exercise of the rights leased hereby.

DATED: September 17, 1971.

DOMINGUEZ WATER CORPORATION

By *Stanley C. Lacerlof*
Stanley C. Lacerlof

Stanley C. Lacerlof

LEASE C: WAT. RIGHTS

THIS LEASE is made and entered into as of the 4th day of December, 1970, by and between LOYOLA UNIVERSITY OF LOS ANGELES, a corporation of 7101 West 50th Street, Los Angeles, California, hereinafter referred to as "Lessor" and DOMINGUEZ WATER CORPORATION, a California corporation of 7101 West 50th Street, Los Angeles, California 90045, hereinafter referred to as "Lessee".

WITNESSETH

WHEREAS, Lessor is the owner of the right to produce and withdraw from the ground water basin in Los Angeles County, California, commonly known as the "West Coast Basin", approximately 48.10 acre feet of water per year and

WHEREAS, Lessee desires to avail itself of the rights of Lessor within West Coast Basin during the water year ending September 30, 1971 and Lessor is willing to allow Lessee to pump Lessor's water right within West Coast Basin in an amount of 48.10 acre feet plus a carry-over from the previous year of 4.5 acre feet during the 1970-71 water year ending September 30, 1971, subject to the terms and conditions hereinafter set forth.

NOW, THEREFORE, IT IS MUTUALLY AGREED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

For and in consideration of the covenants and agreements hereinafter mentioned, Lessor does hereby lease, let, hire to and during the term hereof, assign to Lessee for the water year October 1, 1970 through September 30, 1971, Lessor's right to withdraw from said West Coast Basin 52.6 acre feet of water, together with Lessor's right to devote said water to beneficial uses.

Lessee shall

1. Pay to Lessor the sum of \$325.93. Said sum to be payable December 4, 1970

2. Pay directly to the Central and West Basin Water Replenishment District any and all pump assessments and any and all other charges levied on the waters produced hereunder by Lessee

3. Pay all power costs and other production costs in connection with the production of the water referred to herein.

4. Prepare and file all necessary reports and documents in connection with the water rights leased herein, required by the Central and West Basin Water Replenishment District.

5. Make the necessary filings with the State Water Rights Board, in connection with the waters produced by Lessee hereunder as provided in part 5 of Division 2 (Sections 4999 et seq.) of the Water Code of the State of California as amended and prepare and file any other reports, filings or files as may be required during the term hereof, from time to time by proper authority in connection with the rights leased hereunder.

6. Prepare, file and furnish a copy to Lessor of all reports, documents and papers necessary and advisable for the preservation of Lessor's water rights hereunder, without cost to Lessor.

All notices, bills, demands or communications from one party to the other hereunder shall be in writing, and shall be deemed sufficiently served, given or made by depositing the same in the United States mail in any main or branch post office, in the State of California postage prepaid addressed to the respective party at the address hereinabove and recitals hereof set forth or at such other address either party hereto may specify by written notice given to the other.

This Lease and all of the rights and obligations herein contained, shall bind and inure to the benefit of the respective successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have caused this Lease to be executed in duplicate each of which shall be deemed an original. By their

respective officers, duly authorized and their corporate seals to be hereunto
affixed, at Los Angeles, California, as of the day and year first above mentioned.

LOYOLA UNIVERSITY OF LOS ANGELES

By William J. ...
Vice President - Business Affairs

(Corporate Seal)

By John W. ...
Secretary

DOMINGUEZ WATER CORPORATION

By Richard F. ...
Vice President

(Corporate Seal)

By Wesley ...
Secretary

EXHIBIT A

The parties hereto, DOMINGUEZ WATER CORPORATION, a California corporation, hereinafter DOMINGUEZ, and PICO COUNTY WATER DISTRICT, a county water district organized under Division 12 of the Water Code of California, hereinafter DISTRICT.

This agreement is based on the following facts:

1. DOMINGUEZ has rights to produce water from the Central Basin of California adjudicated to it under Central and West Basin Water Replenishment District vs. Charles E. Adams, et al., No. 786,650 Los Angeles Superior Court, and has the right to extract not less than 350 acre feet from said basin for the balance of the water year 1970-71.
2. DISTRICT has acquired by lease the right to extract not less than 350 acre feet of water from the West Coast Basin for the balance of the water year 1970-71.
3. The parties desire to exchange said rights on the terms and conditions set forth below.

The parties hereto agree as follows:

- A. DISTRICT hereby gives and transfers to DOMINGUEZ its rights to extract water from the West Coast Basin for the water year 1970-71 to the extent of 350 acre feet.
- B. DOMINGUEZ hereby gives and transfers to DISTRICT its rights to extract water from the Central Basin for the

-3-

FOR A FULL AND CONSIDERATION, SANTA FE LAND IMPROVEMENT COMPANY, hereinafter SANTA FE LAND, grants to DOMINGUEZ WATER CORPORATION, hereinafter DOMINGUEZ, a license to extract 350 acre feet of water from the Central Basin of California adjudicated to it under Central and West Basin Water Replenishment District vs. Charles E. Adams, et al., No. 786,650 Los Angeles Superior Court, and has the right to extract not less than 350 acre feet from said basin for the balance of the water year 1970-71.

Said license is granted, subject to the following conditions:

- (1) Licensee shall exercise said right and extract the same on behalf of Santa Fe Land throughout the period above specified and put the same to beneficial use and licensee shall not by the exercise or non-exercise of said right acquire any right to extract water independent of the rights of the licensor.
 - (2) Licensee shall pay assessments levied on the pumping of said ground waters by the Central and West Basin Water Replenishment District.
 - (3) Licensee shall notify the District and the Watermaster that said pumping was done pursuant to this license and provide the Watermaster with a copy of this document.
 - (4) Licensee shall note, in any recording of water production for the period of agreement, that said pumping was done pursuant to this license.
- SANTA FE LAND IMPROVEMENT COMPANY warrants that it has 39.90 acre-feet of Adjudicated Right and that it has not pumped and will not pump or permit or license any other person to pump any part of said 39.90 acre-feet during the period of October 1, 1970 through September 30, 1971.

DATED: July 12, 1970

SANTA FE LAND IMPROVEMENT COMPANY

By Wesley ...
Title Secretary

DOMINGUEZ WATER CORPORATION

By Richard F. ...
Title Vice President

water year 1970-71 to the extent of 350 acre feet.

C. Each party agrees to pay before delinquency all pumping assessments levied by the Central and West Basin Water Replenishment District on the water rights being transferred to each.

D. Each party agrees to pump and extract the full amount of 350 acre feet of water from the basin in which the transferred rights exist and put said amount to beneficial use therein prior to the end of the 1970-71 water year.

E. Each party agrees that the first 350 acre feet extracted by it following the date of this agreement from the basin in which said rights were transferred to it, shall be deemed to be pursuant to and in exercise of the rights transferred hereby.

DATED: August 6, 1971.

DOMINGUEZ WATER CORPORATION

By Wesley ...
C. H. Brewer, President

PICO COUNTY WATER DISTRICT

By Stanley C. Lagerlof
Stanley C. Lagerlof, Secretary

15571
MAY 22 1971
A. R. E. M. N. I.

THIS AGREEMENT made and entered into this 20th day of July, 1971, by and between the LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 13 (DISTRICT), a public corporation hereinafter referred to as "DISTRICT" and the DEPARTMENT OF WATER AND POWER OF THE CITY OF LOS ANGELES, hereinafter referred to as "DEPARTMENT".

RECEIPTS

WHEREAS, both the DISTRICT and DEPARTMENT are producing from the West Basin; and
WHEREAS, DISTRICT has an allowed pumping allocation of 132,000 acre feet of water per year from the West Basin; and
WHEREAS, DEPARTMENT desires to make temporary use of a portion of the DISTRICT'S allowed pumping allocation for one water year only;

NOW, THEREFORE, the parties hereto agree as follows:

1. THE DISTRICT grants to DEPARTMENT a license to produce a portion of DISTRICT'S West Basin allowed pumping allocation to the quantity of 60,000 acre feet for the water year which commences October 1, 1970, and which water year ends on September 30, 1971.
2. DEPARTMENT agrees to pay DISTRICT the net cost of \$13,500.00 before January 1, 1972.
3. DEPARTMENT will pay to the Central and West Basin Water Replenishment District any pump-out expense levied by said Replenishment District during the 1970-1971 water year on

-1-

the quantity of water extracted by the DISTRICT from the West Basin under said license.

4. DEPARTMENT will keep and maintain records of agreed production under this agreement and will report same to the Water Master and to DISTRICT upon completion of DEPARTMENT'S pumping.

IN WITNESS WHEREOF, the parties hereto have authorized the due execution hereof by their respective officers this day and year first above set forth.



DISTRICT
LOS ANGELES COUNTY WATERWORKS
DISTRICT NO. 13 (DISTRICT)

James E. B...
Chairman of the Board of
Supervisors of County of
Los Angeles, as the governing
body of said Waterworks

ADOPTED
BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES

39

JUL 27 1971

James E. B...
DEPARTMENT OF WATER AND POWER OF
THE CITY OF LOS ANGELES

By
BOARD OF WATER AND POWER COMMISSIONERS
OF THE CITY OF LOS ANGELES

By
and
Secretary

ATTEST: June S. Mery
Executive Officer-Clerk of
the Board of Supervisors

James E. B...
Deputy

APPROVED AS TO FORM
JOHN D. MURPHY
County Counsel
County of Los Angeles

APPROVED AS TO FORM AND LEGALITY
BOB BARTON
City Attorney

JUL 26 1971
By
County Clerk

WATSON LAND COMPANY
WATSON LAND COMPANY, a corporation organized under the laws of the State of California, and pursuant to judgment of the Los Angeles Superior Court Case No. 14380 entitled
City of Los Angeles vs. City of Long Beach et al. during
the term ending October 1, 1970 and continuing to and including
September 30, 1971.

Said license is granted, subject to the following conditions:

- (i) Licensee shall exercise said right and extract the same on behalf of Watson Land Company during the period above specified and put the same to beneficial use and a check shall not be the exercise hereunder of said right acquire any right to extract water independent of the right of the licensee.
 - (ii) Licensee shall pay assessments levied on the pumping of said ground waters by the Central and West Basin Water Replenishment District.
 - (iii) Licensee shall notify the District and the Watermaster that said pumping was done pursuant to this license and provide the Watermaster with a copy of this document.
 - (iv) Licensee shall note in any recording of water production for the period of agreement that said pumping was done pursuant to this license.
- WATSON LAND COMPANY warrants that it has 20.00 acre feet of Adjudicated Right and that it has not pumped and will not pump or permit or license any other person to pump any part of said 20.00 acre feet during period of October 1, 1970 through September 30, 1971.

Dated: July 27, 1971

WATSON LAND COMPANY

DOMINGUEZ WATER CORPORATION

By
Title

By *Arthur F. Reyes*
Title Vice President

LEASE OF WATER RIGHTS

THIS AGREEMENT to entered into this 27th day of April, 1971, by and between DOMINGUEZ WATER CORPORATION, hereinafter referred to as "DOMINGUEZ" and MOBIL OIL CORPORATION, hereinafter referred to as "MOBIL".

1. For valuable consideration, the parties hereto agree as follows:

2. Dominguez hereby leases to Mobil and Mobil takes from Dominguez the right to exercise Dominguez's allowed pumping allocation to extract water from the West Coast Basin Water Replenishment District within the Central and West Basin Water Replenishment District in the State of California for the term of one hundred forty (140) years.

3. The term of this lease shall be for the period commencing April 27, 1971, and continuing to and including September 30, 1971.

4. Mobil shall pay, before the beginning of pumping commences levied by the Central and West Basin Water Replenishment District on Dominguez's said one hundred forty (140) acre feet of water right in West Coast Basin.

5. Any ad valorem tax imposed on these rights by the county assessor shall be paid by Dominguez.

6. Dominguez has been adjudged to own at least one hundred forty (140) acre feet of water in the West Coast Basin.

"CALIFORNIA WATER SERVICE COMPANY, et al. vs. City of Long Beach, et al. Los Angeles Superior Court Case No. 500,830. However, Dominguez expressly wishes to warrant that it is the owner of or has the right to lease the water rights purported to be leased hereunder. In the event, however, that it is deemed at any time during the term hereof that Dominguez does not own the respective rights leased hereunder as a result thereof, Dominguez shall return the valuable consideration received hereunder to Mobil. Dominguez does not warrant that it is the owner of or has the right to lease the water rights purported to be leased hereunder. That Mobil is permitted to use the water rights leased hereunder for the term of the rights leased hereunder, to wit, for the term of one hundred (100) years.

eviction or prohibition by any legally constituted government authority, adjustment shall be made between the parties.

7. Mobil shall exercise all of the rights leased hereunder and shall pump the same on behalf of Dominguez and shall put the same to beneficial use. Mobil shall be relieved of obligations under this paragraph to the extent that failure to pump or use rights leased hereunder is caused by inability to pump or use such water due to strikes, lockouts, algae growth in the water table, or any other reason which would make the water industrially unusable, acts of God, or other acts, or occasions of which parties have no control. Mobil shall give notice within a reasonable time of the existence of any of the aforementioned conditions.

8. Mobil shall pump water from said Basin at a rate of 1,500 acre feet per year in a quantity which would include any portion of the One Hundred Forty Eight (148) acre feet leased hereunder.

9. Mobil shall report all of its extractions made pursuant to this lease to all agencies to whom such reports must be made, or in the alternative, shall provide such information regarding its pumping to Dominguez so that Dominguez may make such reports, if any are required during the term of this lease.

10. If either party to this lease shall desire to serve a notice on the other, such notice shall be deemed to have been made if those sent to Dominguez are mailed to: Mr. C. Marvin Bauer, President, Dominguez Water Corporation, 2118 South Alameda Street, Long Beach, California, 90801, and all notices sent to Mobil are mailed to: Mr. R. J. Hinderkraft, Manager, Torrance Refinery, 3701 West 150th Street, Torrance, California 90503. Delivery will be deemed to have been made when deposited in the United States mail, postage prepaid. Either party may, by notice in writing to the other, change such address for notices to be.

- 2 -

IN WITNESS WHEREOF the parties hereto execute this agreement on the date first above written.

DOMINGUEZ WATER CORPORATION

By *[Signature]*
President

MOBIL OIL CORPORATION

By *[Signature]*
Attorney in Fact

RECEIVED	DATE
8-12-71	

LEASE OF WATER RIGHTS

THIS AGREEMENT is entered into this 16th day of September 1970 by and between STANDARD OIL COMPANY OF CALIFORNIA, WESTERN OPERATIONS, INC., (a division of Standard Oil Company of California a Delaware Corporation), hereinafter referred to as "STANDARD" and MOBIL OIL CORPORATION, hereinafter referred to as "MOBIL."

For and in consideration of the mutual undertakings and obligations of the parties as hereinafter set out and for other valuable consideration, the parties hereto agree as follows:

- STANDARD hereby leases to MOBIL and MOBIL leases from STANDARD the right to exercise STANDARD's appropriate, prescriptive and adjudicated right to extract water from the West Coast Basin (the ground water basin within the Central and West Basin Water Replenishment District in the State of California) to the extent of One Thousand Five Hundred (1,500) acre feet.
- The term of this lease shall be for the water year commencing October 1, 1970, and continuing to and including September 30, 1971.
- MOBIL shall pay to STANDARD, by check, on or before September 30, 1971 the sum of Thirty-seven Thousand Five Hundred and No/100 Dollars (\$37,500.00), which sum represents Twenty-five and No/100 Dollars per acre foot.
- In the event that an ad valorem tax is imposed on STANDARD's water rights for the period of this contract, and STANDARD pays that tax, MOBIL will reimburse STANDARD by the amount of such tax applicable to the One Thousand Five Hundred (1500) acre feet leased herein. This amount will be in addition to the amount stipulated in Item 3, above.

- 1 -

If for any reason the tax collector makes a refund of said tax to STANDARD, then STANDARD shall remit same to MOBIL.

- MOBIL shall pay, before delinquency, all pumping assessments levied by the Central and West Basin Water Replenishment District on STANDARD's said One Thousand Five Hundred (1500) acre feet of water right.
- STANDARD has been adjudicated to own at least One Thousand Five Hundred (1500) acre feet of water in the case entitled CALIFORNIA WATER SERVICE COMPANY et al v City of Long Beach et al, Los Angeles Superior Court Case No. 50A-80. However, STANDARD expressly makes no warranty that it is the owner of or has the right to lease the water rights purported to be leased hereunder. In the event, however, that it is deemed at any time during the term hereof that STANDARD does not own the rights leased hereunder or any part thereof, STANDARD shall return to MOBIL any consideration paid to STANDARD, computed on the above price per acre foot for any water rights which MOBIL is unable to exercise because of STANDARD's lack of ownership in said water rights. STANDARD does not warrant that there is sufficient water in said West Basin so as to enable MOBIL to exercise the rights leased to it hereunder, but in the event that MOBIL is prevented from exercising all or any portion of the rights leased hereunder due to exhaustion of said basin or intervention or prohibition by any legally constituted government authority, any consideration paid by MOBIL to STANDARD shall be returned to MOBIL upon the same basis as that stated above.

Submitting Date	10/1	Date	10/28/70
Account no. to transfer			
To: Life Sav.			
Branch			
Comments			

LICENSE FOR WATER RIGHTS
WEST COAST CASIN

This agreement is entered into this 15th day
of March, 1970, by and between Southern California
Edison Company, a California corporation, herein "ter referred
to as LICENSOR, and CITYCAT OF LOS ANGELES
after referred to as "LICENSEE".

For and in consideration of the mutual undertakings and obligations of the parties as hereinafter set forth and for other valuable consideration, the parties hereto agree as follows:

1. LICENSOR hereby gives to LICENSEE and LICENSEE takes from LICENSOR the right to exercise LICENSOR's appropriate, prescriptive and adjudicated right(s) to extract water from the West Coast Basin (the ground water basin within the Central and West Basin Water Replenishment District in the State of California) to the extent of five acres-feet per annum.

2. The term of this license shall be for the water year commencing October 1, 1970, and continuing to and including September 30, 1971, provided, however, that this agreement shall terminate immediately upon the expiration, cancellation or termination of the license previously granted to Licensee, dated May 15, 1970, bearing Licensor's document number 22154.

3. LICENSEE shall pay, before delinquency, all pumping assessments levied by the Central and West Basin Water Replenishment District on LICENSOR'S said fifty 50 acre-foot of water right(s).

4. LICENSEE SHALL comply promptly with all requirements of the Central and West Basin Water Replenishment District (including the filing of pumping reports and the obtaining of exchange pool water if necessary) and those of any public agency or authority.

5. LICENSOR has been adjudicated to own at least fifty-seven and one tenth (57.1) acre-feet of water in the state entitled California Water Service Company, et al, vs. City of Compton, et al, Case No. 506,806. However, LICENSOR expressly makes no warranty that it is the owner of or has the right to give the water rights purported to be given hereunder. LICENSOR does NOT warrant that there is sufficient water in said West Coast Basin so as to enable LICENSEE to extract the rights given to it hereunder.

6. LICENSEE shall exercise all of the rights given hereunder and shall pump the same on behalf of LICENSOR and shall put the same to beneficial use. LICENSEE shall be relieved of its obligations under this paragraph to the extent that it is unable to do so due to the fact that the water given hereunder is caused by LICENSEE's inability to pump or use such water due to strikes, lockouts, algae growth in the water table or any other reason which would make the water unusable for agricultural or industrially unusable by LICENSEE, or any other cause beyond the control of LICENSEE. LICENSEE shall notify LICENSOR within a reasonable time of the existence of any of the aforementioned conditions.

7. LICENSOR shall not pump water from said West Coast Basin during the term of this license in a quantity which would include any portion of the _____
----- (50) acre-foot given hereunder -----

6. LICENSEE agrees to relinquish to LICENSOR the right to pump any of the 1000 acre-feet herein licensed not pumped by the

9. If either party to this license shall desire to serve a notice on the other, such notice shall be deemed to have been received if those sent to LICENSOR are mailed to Manager of Right of Way and Land Department, Southern California Edison Company, P. O. Box 153, Los Angeles, California 90012. If notices are sent to LICENSEE, Property Management, and all notices sent to LICENSEE are mailed to 15777 Indio Avenue, Fontana, California 92335.

IN WITNESS WHEREOF, the parties hereto execute this agreement on the date first above written.

SOUTHERN CALIFORNIA EDISON COMPANY
a California corporation

By MANAGER, R/W & Land Department
LICENSOR

By Chisato Otani LICENSEE

THIS DEED is entered into this 1st day of August, 1971, by and between UNITED STATES STEEL CORPORATION, a Delaware corporation, hereinafter referred to as "UNITED STATES STEEL", and PICO COUNTY WATER DISTRICT, a county water district organized under the Water Code of California, hereinafter referred to as "PICO".

For and in consideration of the mutual undertakings and obligations of the parties as hereafter set forth, and for other valuable consideration, the parties hereto agree as follows:

1. UNITED STATES STEEL has been adjudicated a right to produce, extract and withdraw 1701 acre feet of water per annum from the West Coast Basin, as said Basin is described in the Judgment in Los Angeles Superior Court Case No. 506806 entitled "California Water Service Company, et al., v. City of Longton, et al."
2. UNITED STATES STEEL HEREBY leases to PICO and PICO hereby accepts from UNITED STATES STEEL a portion of said adjudicated right to the extent of 380 acre feet.
3. The term of this lease shall commence on the date of this lease and continue to and including September 30, 1971.
4. PICO shall pay to UNITED STATES STEEL the sum of \$9,500.00 on or before September 30, 1971.
5. PICO shall pay, before delinquency, all pumping assessments levied by the Central and West Basin Water Replenishment District on UNITED STATES STEEL's said 380 acre feet of water rights.

-1-

6. PICO shall exercise or cause to be exercised all of the rights leased hereunder and shall pump the same on behalf of UNITED STATES STEEL and shall put or cause to be put the same to beneficial use on or before September 30, 1971.

7. The last 380 acre feet of water extracted by PICO or others on its behalf from said West Coast Basin during the water year ending September 30, 1971, shall be deemed to be pursuant to and in exercise of the rights leased hereby; and if for any reason said last 380 acre feet of water cannot be considered or deemed to have been extracted pursuant to and in exercise of the rights leased hereby, then any 380 acre feet of water extracted by PICO or others on its behalf between the date hereof and September 30, 1971, shall be deemed to be pursuant to and in exercise of the rights leased hereby.

UNITED STATES STEEL CORPORATION
By /s/ [Signature]
Vice President-Western Steel Operations
PICO COUNTY WATER DISTRICT
By /s/ [Signature]
President
By /s/ [Signature]
Secretary

-2-

WITNESSES: [Signatures]
ASSOCIATED SOUTHERN INVESTMENT COMPANY, INC. 10000 W. 10th St. Los Angeles, CA 90024
FEB 23 1971
Rm. 10000 order

DEED OF WATER RIGHTS
(West Basin)

For a valuable consideration, ASSOCIATED SOUTHERN INVESTMENT

COMPANY, a corporation, hereby sells and transfers to SOUTHERN CALIFORNIA WATER SERVICE COMPANY, a corporation,

All of said water's Adjudicated Right allocated to grantee under and pursuant to Judgment dated August 19, 1961 and entered in Los Angeles Superior Court Case No. 506806 entitled "California Water Service Company, et al., v. City of Longton, et al."

Subject to local property taxes for the fiscal year 1970-1971, and all and the same.

Dated this 1st day of August, 1971.

ASSOCIATED SOUTHERN INVESTMENT

COMPANY, INC.
By /s/ [Signature] President
By /s/ [Signature] Secretary

SOUTHERN CALIFORNIA WATER

SERVICE COMPANY, INC.

By /s/ [Signature] President
By /s/ [Signature] Secretary

-1-

STATE OF CALIFORNIA
COUNTY OF []

On this 1st day of August, 1971, before me, a Notary Public in and for the State of California, personally appeared [Signature], known to me to be the President and Secretary of Associated Southern Investment Company, Inc., the corporation that executed the within instrument on behalf of the corporation herein named, and acknowledged to me that such corporation executed the same, pursuant to its by-laws or a resolution of its board of directors.

STATE OF CALIFORNIA
COUNTY OF []
On this 1st day of August, 1971, before me, a Notary Public in and for the State of California, personally appeared [Signature], known to me to be the President and Secretary of Associated Southern Investment Company, Inc., the corporation that executed the within instrument on behalf of the corporation herein named, and acknowledged to me that such corporation executed the same, pursuant to its by-laws or a resolution of its board of directors.
WITNESS my hand and official seal.

STATE OF CALIFORNIA
COUNTY OF []
On this 1st day of August, 1971, before me, a Notary Public in and for the State of California, personally appeared [Signature], known to me to be the President and Secretary of Associated Southern Investment Company, Inc., the corporation that executed the within instrument on behalf of the corporation herein named, and acknowledged to me that such corporation executed the same, pursuant to its by-laws or a resolution of its board of directors.
WITNESS my hand and official seal.

3102

3109

The parties, JOHN DOE COMPANY, a corporation, having its principal office in LOS ANGELES, and PICO COUNTY WATER DISTRICT, a county water district organized under Division 12 of the Water Code of California, hereinafter DISTRICT.

This agreement is based on the following facts:

1. STAUFFER has rights to produce water from the Central Basin of California adjudicated to it under Central and West Basin Water Replenishment District vs. Charles E. Adams, et al., No. 788,656 Los Angeles Superior Court, and has the right to extract not less than 30 acre feet from said basin for the balance of the water year 1970-71.

2. DISTRICT has acquired by lease the right to extract not in excess of 30 acre feet of water from the West Coast Basin for the balance of the water year 1970-71.

3. The parties desire to exchange said rights on the terms and conditions set forth below.

The parties hereto agree as follows:

A. STAUFFER hereby gives and transfers to DISTRICT its rights to extract water from the West Coast Basin for the water year 1970-71 to the extent of 30 acre feet.

B. STAUFFER hereby gives and transfers to DISTRICT its rights to extract water from the Central Basin for the water year 1970-71 to the extent of 30 acre feet.

C. Each party agrees to pay and deliver to the other all pumping costs incurred by the Central and West Basin Water Replenishment District on the water rights being transferred to each.

D. Each party agrees to pay and extract the full amount of 30 acre feet of water from the basin in which the transferred rights exist and pay said amount to beneficial use therein prior to the end of the 1970-71 water year.

E. Each party agrees that the quantity extracted between the date of this agreement and the end of the 1970-71 water year from the basin in which said rights were transferred to it, 30 acre feet of said quantity shall be deemed to be paid and in exercise of the rights transferred hereby.

DATED: August 17, 1971.

STAUFFER CHEMICAL COMPANY

By [Signature] Authorized Signature

PICO COUNTY WATER DISTRICT

By [Signature] Stanley C. Lagerlof, Secretary

SUGGESTED SAMPLES OF DOCUMENTS FOR TRANSFERRING WATER RIGHTS

YEARLY LEASE	PERMANENT TRANSFER
<p><u>WATER RIGHT LICENSE AND AGREEMENT</u></p> <p>For a valuable consideration, THE JOHN DOE COMPANY hereby grants to John Smith a license to extract _____ acre-feet of licensor's Adjudicated Right allocated to licensor (or predecessors in interest) under and pursuant to Judgment dated August 18, 1961, and entered in Los Angeles Superior Court Case No. 538808 entitled "California Water Service Company, et al. vs. City of Oxnard, et al. during the period commencing October 1, 1961, and continuing to and including September 30, 1962."</p> <p>Said license is granted, subject to the following conditions:</p> <ol style="list-style-type: none"> (1) Licensee shall exercise said right and extract the same on behalf of JOHN DOE COMPANY during the period above specified and put the same to beneficial use and licensee shall not by the exercise hereunder of said right acquire any right to extract water independent of the rights of licensor. (2) Licensee shall pay assessments levied on the pumping of said ground waters by the Central and West Basin Water Replenishment District. (3) Licensee shall notify the District and the Watermaster that said pumping was done pursuant to this license and provide the Watermaster with a copy of this document. (4) Licensee shall note, in any recording of water production for the period of agreement, that said pumping was done pursuant to this license. <p>JOHN DOE COMPANY warrants that it has _____ acre-feet of Adjudicated Right and that it has not pumped and will not pump or permit or license any other person to pump any part of said _____ acre-feet during period of October 1, 1961 through September 30, 1962.</p> <p>Dated _____</p> <p>JOHN DOE COMPANY JOHN SMITH</p> <p>By _____ By _____</p> <p>Title _____ Title _____</p>	<p><u>DEED OF WATER RIGHTS</u></p> <p>For a valuable consideration, JOHN SMITH hereby sells and transfers to the JOHN DOE COMPANY:</p> <p>The Right to extract _____ acre-feet of grantor's Adjudicated Right allocated to grantor (or predecessors in interest) under and pursuant to Judgment dated August 18, 1961 and entered in Los Angeles Superior Court Case No. 538808 entitled "California Water Service Company, et al. vs. City of Oxnard, et al."</p> <p>Dated: _____</p> <p>JOHN DOE COMPANY JOHN SMITH</p> <p>By _____ By _____</p> <p>Title _____ Title _____</p>

APPENDIX B
GROUND WATER EXTRACTIONS

TABLE B-1
GROUND WATER EXTRACTIIONS
IN ACF- FEET

		PRODUCTION												TOTAL	
STATE	OWNER'S	1970						1971							
WELL	DESIGN														
NUMBER	NATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT		
A B C NURSERY, INC															
35/13W-29F11S	1	3.83	2.32	.44	1.13	1.52	2.56	3.60	2.72	3.45	4.78	5.03	4.25	35.67	
AMERICAN PLANT GROWERS INC															
45/13W-19J06S	8294	2.42	1.27	.75	.97	1.85	2.70	2.15	2.45	3.21	2.23	4.43	5.46	29.89	
ATLANTIC RICHFIELD COMPANY															
45/13W-21J07S	10	187.59	203.30	218.70	212.98	198.14	207.13	207.07	207.54	202.93	169.13	189.08	62.29	2265.88	
45/13W-22E01S	5	98.37	128.40	151.56	139.03	123.96	104.49	98.38	47.05	12.76	60.80	46.17	0	1010.97	
45/13W-21H05S	7	7.71	0	32.32	69.19	30.71	32.28	46.87	35.44	20.95	0	65.25	24.28	364.80	
45/13W-21H04S	8	109.52	16.01	36.28	73.87	50.91	17.00	39.03	11.26	45.50	113.01	112.87	19.01	639.27	
45/13W-22F01S	4	34.85	.41	3.92	0	3.34	125.43	133.55	142.90	144.50	135.83	147.57	2.99	875.29	
45/13W-16J02S	11	95.63	66.54	109.59	215.25	174.92	213.99	169.69	187.66	195.23	178.17	167.94	180.86	1957.46	
45/13W-21H07S	12	371.72	371.84	374.70	368.34	325.35	356.07	343.90	357.40	344.70	350.11	334.82	318.67	4217.66	
TOTALS		905.39	788.54	927.06	1078.66	907.33	1056.39	1033.29	989.25	966.57	1007.05	1063.70	608.10	11331.33	
CALIFORNIA WATER SERVICE COMPANY															
35/14W-24F01S	2001	69.47	64.38	53.23	78.13	65.63	67.90	65.53	53.89	57.60	64.76	62.57	43.26	748.35	
35/14W-24J01S	2201	49.50	91.60	104.03	105.00	94.51	94.89	102.04	98.01	90.93	70.83	52.37	61.74	1065.45	
45/14W-16F01S	2501	15.35	15.19	15.22	21.12	9.90	18.96	14.87	21.19	20.43	17.07	17.74	13.46	201.00	
35/14W-32A02S	H-02	0	0	0	0	0	0	0	0	12.65	55.48	45.79	40.98	154.90	
TOTALS		184.32	171.17	172.48	204.25	170.04	183.75	182.44	173.09	182.11	208.14	178.47	159.44	2169.70	
CHANDLER'S PALMS VERDES SAND-GU CURP															
45/14W-35F02S	PLANT	4.97	3.93	3.24	5.38	4.46	4.73	5.41	6.38	6.52	11.27	8.99	7.69	72.97	
45/14W-28J01S	10881	1.40	1.40	1.20	.67	1.47	4.23	2.74	2.80	1.49	2.62	3.36	.80	24.70	
45/14W-27H01S	10882	7.31	4.53	6.85	9.42	6.05	9.40	10.09	11.20	10.80	11.21	10.77	2.53	102.16	
45/14W-35E04S	SIDEH	7.52	6.04	5.29	5.62	10.43	22.11	15.63	12.57	9.02	16.33	13.63	15.85	140.04	
TOTALS		21.20	15.90	14.58	21.09	24.41	40.47	33.87	32.95	28.33	41.43	36.77	26.87	339.87	
DESSEK ENTERPRISES															
45/13W-15J01S	9784	.03*	0*	.05*	0*	.02*	0*	.02*	0*	.02*	0*	.02*	0*	.16	
DOMINGUEZ WATER CORPORATION															
45/13W-11J03S	1072	7.20	4.73	0	1.40	1.40	5.27	.54	3.28	7.16	2.50	6.87	5.51	45.86	
45/13W-17J01S	19	48.78	27.62	0	0	0	0	0	0	.05	59.79	78.65	72.48	287.37	
45/13W-15S	MP001	339.04	209.37	244.71	308.03	40.44	417.16	400.49	296.41	293.40	587.34	601.71	556.47	4334.57	
45/14W-10J03S	32	163.59	88.35	0	126.30	233.27	223.66	179.11	65.66	158.74	194.88	214.98	167.19	1815.73	
45/14W-10J04S	33	242.91	250.46	246.58	151.04	53.61	148.09	202.35	209.88	140.35	236.18	225.81	209.83	2317.67	
TOTALS		801.52	580.93	531.29	586.77	328.72	794.18	782.69	575.21	599.70	1080.69	1128.02	1011.48	8801.20	
FLETCHER OIL AND REFINING COMPANY															
45/13W-30A05S	3	4.71	4.51	8.35	6.67	5.14	7.04	6.73	7.18	6.57	6.07	4.41	8.44	76.32	
FUJIMOTO, SAMUEL W AND RAYMOND S															
35/13W-30A11S	1	.46	.22	.16	.29	.51	.39	.65	.97	.85	1.02	1.28	.46	7.26	
HANTHORNE CITY OF															
35/14W-04J04S	4	14.94	3.41	4.44	1.14	0	18.47	7.25	8.91	8.56	12.18	12.58	10.97	103.25	
35/14W-09J01S	8	20.10	9.10	9.82	4.11	5.93	36.44	12.91	14.56	11.67	7.76	0	0	131.90	
35/14W-09J05S	12	128.45	119.84	120.33	114.48	107.29	128.85	90.96	45.63	55.06	62.93	66.43	68.09	1108.34	
35/14W-09J01S	13	0	0	0	0	0	0	35.62	97.93	109.41	106.28	74.43	119.44	543.11	
TOTALS		163.49	132.35	134.99	119.73	112.72	183.76	146.74	167.03	184.70	189.15	153.44	198.50	1886.60	
HILLSIDE MEMORIAL PARK															
25/14W-19J03S	2	3.33	0	0	.24	0	1.67	.21	.65	2.32	4.22	13.74	9.65	36.03	
HOLLYWOOD TOWN CLUB															
25/14W-34J02S	1N001	20.09	8.44	1.34	6.99	4.79	6.59	15.41	14.66	20.33	23.46	20.58	19.55	162.23	
25/14W-34F01S	OUT02	10.03	6.44	1.19	2.39	5.01	10.08	9.74	12.58	9.35	14.37	12.09	11.43	104.74	
TOTALS		30.12	14.92	2.53	9.38	9.80	16.67	25.15	27.24	29.68	37.83	32.67	30.98	266.97	

TABLE H-1
GROUND WATER EXTRACTIIONS
(CONTINUED)
IN ACF- FEET

		PRODUCTION													TOTAL
DATE	WELL	1970				1971									
DESIGN	DESIGN														
NUMER	NATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT		
INDUSTRIAL CHEM DIV-ALLIED CHEM CORP															
35/14w-18045	4	7.94	3.03	0	.55	0	7.99	2.07	0	1.30	4.44	0	0	27.36	
35/14w-18055	5	9.34	12.06	13.14	2.40	11.90	10.32	6.24	16.79	17.82	20.55	23.66	21.46	165.74	
TOTALS		17.28	15.09	13.14	2.95	11.90	18.31	8.31	16.79	19.12	24.99	23.66	21.46	193.10	
INGLEWOOD, CITY OF															
25/14w-32F015	21	12.47	0	64.21	102.35	61.33	71.77	66.01	68.45	76.63	71.56	58.88	69.91	728.97	
25/14w-28F015	23	12.71	0	1.54	.14	1.88	0	0	0	0	0	2.06	0	18.33	
25/14w-28F015	24	57.47	20.63	35.68	8.36	0	30.52	44.74	43.45	40.48	38.01	0	0	314.74	
25/14w-28M015	26	49.52	48.64	4.89	59.07	57.28	51.52	44.35	62.13	67.41	23.96	50.50	67.06	591.33	
25/14w-28M025	29	38.24	0	0	0	0	0	0	0	0	0	0	0	38.28	
35/14w-10G025	30	28.65	27.74	27.45	27.94	14.88	31.01	12.21	31.41	28.38	28.89	23.94	21.16	308.78	
25/14w-32C025	34	56.45	74.46	80.25	86.12	43.58	79.06	76.74	68.74	73.79	77.88	88.67	92.59	860.38	
35/14w-03M015	38	88.55	62.19	145.68	134.56	76.88	121.55	148.40	142.11	130.78	146.44	143.10	96.21	1436.45	
25/14w-34C025	2	4.16	4.34	.27	2.58	3.20	6.53	6.49	5.15	3.28	2.99	2.95	2.89	45.28	
TOTALS		341.70	247.04	363.43	422.57	262.29	343.84	404.34	419.89	420.75	349.73	370.14	309.82	4342.54	
IRVINE, RICHMOND															
35/14w-29C015	10	1.44	1.05	.27	.49	.84	1.34	1.54	1.66	1.98	2.75	2.47	2.23	18.06	
IRVINE, RICHMOND															
45/14w-24C015	01F04	4.83*	3.40*	0*	.28*	1.62*	3.11*	3.11*	3.51*	4.50*	4.32*	.23*	0*	29.37	
JOHN MANVILLE PRODUCTS CORP															
45/14w-15011	01F01	74.05	70.67	75.16	73.41	68.48	88.33	76.69	75.90	74.96	74.67	81.84	34.33	858.89	
LOS ANGELES, CITY OF															
45/14w-71	5	247.52	0	0	116.45	62.44	0	0	289.72	454.14	441.92	445.13	435.49	2548.21	
LOS ANGELES COUNTY ALONDRA PARK															
35/14w-27C015	761	51.43	51.85	22.60	56.46	24.72	45.49	44.35	75.43	63.34	64.63	72.19	71.23	664.16	
LOS ANGELES COUNTY SANIT DIST NO 2															
45/14w-30C015	819	9.23	8.94	0	8.50	8.47	8.48	8.50	8.52	9.70	9.63	1.15	4.73	85.90	
LOS ANGELES COUNTY WESTERN AVE GOLF															
35/14w-11J025	1397C	13.23	5.46	.08	1.31	5.65	2.76	18.35	17.03	14.21	25.54	28.71	16.18	154.21	
MANHATTAN BEACH, CITY OF															
35/14w-29J015	11	2.74	.12*	.08	8.72	.05	.06	.06	.04	.07	.03	.03	.04	12.04	
35/14w-30M025	13	0	0	.16	4.55	0	0	0	0	0	0	2.20	5.18	17.09	
TOTALS		2.74	.12	.24	13.27	.05	.06	.06	.04	.07	.03	2.23	5.22	29.13	
MAYFLOWER NUMERALS															
35/14w-25K015	00M01	.03	.02	.05	.03	.03	.04	.04	.05	.10	.08	.01	.02	.50	
35/14w-31J075	00M02	.09	.04	.20	.10	.04	.24	.14	.22	.21	0	.53	.26	2.17	
TOTALS		.12	.06	.25	.13	.12	.33	.18	.27	.31	.08	.54	.28	2.67	
MOBILE OIL CORPORATION															
45/14w-03L025	T0002	124.78	106.46	107.97	116.27	54.70	106.38	109.13	111.40	103.94	103.45	102.68	90.12	1239.33	
45/14w-03L035	T0001	110.54	4.71	4.81	55.28	40.04	41.44	92.21	109.10	88.03	102.07	100.24	88.56	884.13	
45/14w-03L045	T0004	0	87.69	84.48	48.11	70.03	55.82	11.34	14.62	38.13	28.85	38.16	79.11	562.10	
45/14w-03M015	T0005	137.77	141.20	145.78	136.63	106.68	133.02	126.66	136.83	128.77	138.17	132.18	131.99	1543.46	
TOTALS		373.14	340.06	348.04	356.29	314.48	340.66	339.34	371.75	354.68	372.54	373.26	384.78	4284.02	
OILAND CHEMISATO															
35/14w-34J015	SCFCO	2.58	0	0	0	.25	1.33	1.92	2.85	2.84	2.40	.83	0	15.00	
35/14w-33M015	OTANJ	2.07	2.12	0	.55	.99	2.95	4.06	3.08	5.41	6.62	5.85	3.00	36.70	
TOTALS		4.65	2.12	0	.55	1.24	4.28	5.98	5.93	8.25	9.02	6.68	3.00	51.70	

TABLE D-1
GROUND WATER EXTRACTIIONS
(CONTINUED)
IN ACRE-FEET

STATE WELL NUMBER	OWNERS DESIGN- NATION	PRODUCTION												TOTAL
		1971												
		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	
PACIFIC WEST CEMETERY COMPANY														
35/144-33E015	743	3.30	1.71	.12	1.00	.71	2.20*	2.50	3.91	6.37	5.63	5.87	3.93	37.25
PALOS VERDES HEGONIA FARM														
45/144-71J015	1	.19*	.14*	.05*	.10*	.17*	.18*	.19*	.20*	.25*	.34*	.29*	.25*	2.30
PARK WATER COMPANY														
35/144-22H025	154	.14	.40	.05	.12	.09	.10	.15	.14	.10	.13	.05	.06	1.53
35/144-22H015	154	.99	0	0	.83	.01	.03	.05	.03	.07	.47	.80	.26	3.54
35/144-22K015	15C	30.86	20.53	10.93	15.91	19.15	26.10	21.27	24.80	33.40	31.64	38.69	24.03	301.31
TOTALS		31.99	20.93	10.98	16.86	19.25	26.23	21.47	24.97	33.57	32.24	39.54	28.35	306.38
ROMAN CATHOLIC ARCHBISHOP OF L A														
25/144-18H015	HOLTX	12.25	3.44	.01	.26	1.36	11.06	10.55	14.14	17.35	25.92	25.24	6.24	127.87
SHEETS, ESTHER M														
35/134-32E025	R23F	.15	.08	.05	.04	.08	.18	.21	.18	.16	.10	.10	.08	1.45
SHELL OIL COMPANY														
45/134-21H015	W1002	45.51	67.87	24.69	65.78	92.67	101.63	84.68	78.42	71.03	74.59	49.44	30.98	789.29
45/134-09A015	D0003	77.95	78.24	77.18	81.78	66.81	78.70	66.89	62.32	0	39.16	50.94	28.85	706.82
45/134-10E035	D0004	88.46	84.86	84.36	84.44	72.62	53.04	42.23	64.44	54.88	58.77	48.89	58.28	804.86
45/134-09H025	D0005	123.71	110.93	97.39	83.18	68.21	148.27	188.54	183.76	172.87	167.78	178.82	167.78	1691.24
45/134-21H025	W1003	0	0	0	0	0	0	33.65	7.51	1.11	0	44.46	106.77	193.50
TOTALS		335.64	343.70	242.62	315.18	300.31	382.44	415.99	394.45	299.69	340.30	372.55	392.66	4185.73
SHINODA BROS INC														
35/144-35H075	NEW	1.05	1.15	.68	.73	1.14	1.51	1.48	1.17	1.30	1.06	1.47	.82	13.56
SOUTHERN CALIFORNIA Edison COMPANY														
35/144-34B025	FRFSA	.92	1.01	.03	.03	.90	.34	.39	.57	.46	.53	.77	.35	6.30
45/134-27A025	WANSU	.08	.05	.04	.03	.04	.06	.06	.05	.05	.06	.07	.07	.66
45/134-14A075	INGLF	.07	.06	.07	.04	.16	.15	.13	.09	.10	.13	.12	.14	1.46
TOTALS		1.07	1.12	.14	.10	1.10	.55	.58	.71	.61	.72	.96	.76	8.42
SOUTHERN CALIFORNIA WATER COMPANY														
35/144-14A015	F0001	16.14	0	.06	.02	.12	.91	.17	.08	.05	18.41	34.07	44.51	114.56
35/144-04N015	T0001	51.74	45.85	55.17	60.71	58.74	62.70	48.55	47.43	42.64	54.83	48.59	46.79	614.99
35/144-04N025	T0002	0	0	.02	7.67	6.22	0	0	0	0	0	0	.04	13.95
35/144-22A015	C0001	55.98	51.88	63.54	62.99	45.94	63.23	44.17	40.40	44.67	59.90	71.60	57.30	663.62
35/144-22A025	C0002	32.22	25.41	31.30	29.91	22.44	40.13	29.13	32.90	37.10	51.87	64.72	50.64	447.81
35/144-13B025	8A003	65.62	29.94	24.27	28.94	47.56	37.74	20.33	21.03	16.42	49.67	44.97	37.07	423.38
35/144-03K015	YU001	66.55	73.32	67.49	51.29	39.44	46.22	43.37	39.41	24.91	24.46	19.69	24.55	525.70
35/144-03K025	YU002	14.79	0	0	41.14	70.01	78.27	78.25	81.15	86.42	80.83	75.68	70.20	676.79
35/144-03K035	YU003	25.51	25.22	26.20	26.01	21.60	23.23	22.01	23.02	9.41	21.81	20.18	18.83	268.03
35/144-13J015	S0003	42.55	0	46.46	56.14	50.70	51.18	11.75	11.49	26.71	54.15	56.50	50.85	484.52
35/144-13J045	S0004	7.76	0	13.32	10.81	10.94	20.09	5.24	2.59	5.11	7.62	9.61	6.15	99.24
35/144-14N015	129	61.50	37.04	36.97	45.29	47.67	54.47	44.95	32.68	31.51	56.81	47.47	41.68	538.04
35/144-22L015	C0001	65.84	31.94	47.67	70.70	80.97	101.25	33.33	9.52	22.51	82.30	88.72	83.27	718.04
35/144-21H015	C0001	0	0	.05	9.14	.96	.09	2.58	.08	0	.09	.09	.03	13.10
35/144-25B045	D0001	37.03	15.84	34.11	44.49	36.17	43.75	43.75	9.24	10.88	42.66	49.11	44.14	376.75
35/144-11G025	W1001	58.64	35.29	51.12	61.01	48.97	50.17	43.81	32.34	45.70	56.69	55.93	50.45	590.12
TOTALS		601.69	370.95	447.75	606.42	588.45	673.43	479.82	379.36	409.29	662.10	686.93	632.50	6548.69
SPANISH AMERICAN INSTITUTE														
35/134-19D035	RIIT	1.15	.64	.27	.41	.54	.92	1.00	1.23	1.25	2.27	1.12	1.55	12.35
SPARKLETS DRINKING WATER CORP														
35/134-29D045	1	3.08	4.96	5.14	4.89	5.70	5.82	5.00	7.76	6.17	4.63	5.06	5.16	63.37
35/134-29D075	2	6.49	4.21	4.76	4.16	4.84	4.94	6.25	2.57	4.07	3.88	4.27	4.41	54.52
TOTALS		9.57	9.17	9.90	9.05	10.54	10.81	11.25	10.33	10.24	8.51	9.33	9.57	117.89
STAUFFER CHEMICAL COMPANY														
45/134-10D025	D0014	73.78	34.95	42.02	41.25	34.43	23.29	41.17	45.48	48.43	47.91	42.46	43.42	474.04
45/134-22F025	H4001	15.76	3.81	5.17	4.42	3.69	3.18	2.72	6.09	7.11	7.02	6.17	3.80	70.94
TOTALS		39.54	43.76	47.19	45.67	38.62	26.47	43.84	51.57	55.54	54.93	50.63	47.22	544.98

TABLE B-1
GROUND WATER EXTRACTIONS
(CONTINUED)
IN ACRE-FEET

STATE	OWNER'S	DESIGNATION	PRODUCTION												TOTAL
			1970			1971									
NUMBER	NATION		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	
TEXACO INCOMPANETD															
45/13w-27m015	3	168.44	173.98	171.35	167.25	160.86	165.72	146.05	244.82	115.98	99.30	75.92	68.22		1757.81
45/13w-27m035	5	134.06	119.42	81.75	98.09	100.54	69.05	54.03	61.20	43.85	0	0	0		767.99
45/13w-27m045	6	70.26	62.58	51.34	51.34	45.89	50.96	46.63	74.81	14.10	0	0	0		467.91
45/13w-27m055	8	0	0	0	0	0	0	0	0	68.47	301.11	279.63	248.98		898.19
TOTALS		372.76	355.98	310.44	316.68	307.29	285.73	246.71	380.83	242.40	400.41	355.55	317.20		3891.98
TOURANCE, CITY OF															
45/14w-10j015	2	.31	0	0	0	0	.13	4.60	5.97	7.40	57.47	37.60	2.15		115.63
45/14w-16l045	3	1.34	0	0	2.16	0	.15	13.59	99.73	72.48	46.26	49.23	52.43		337.37
45/14w-10k025	4	60.53	20.48	9.74	16.86	11.49	24.32	45.06	131.18	197.55	287.68	296.73	131.89		1233.51
45/14w-10k035	5	13.43	4.70	0	0	0	0	39.70	287.07	330.36	344.28	354.02	321.78		1695.34
35/14w-34c025	6	0	1.44	0	.69	0	.26	.03	41.69	61.53	127.90	131.02	34.54		399.10
TOTALS		75.61	26.62	9.74	19.71	11.49	24.86	102.98	565.64	669.32	863.59	868.60	542.79		3780.95
UNION NURSERY INC															
35/13w-296045	831AH	1.48	.71	.43	.91	1.09	1.70	1.69	1.58	2.02	2.27	2.08	1.97		17.93
UNION OIL COMPANY OF CALIFORNIA															
45/13w-31j015	LA003	60.36	118.72	204.13	203.43	179.35	179.35	194.27	182.38	169.14	158.81	143.99	136.42		1930.35
UNITED STATES STEEL CORPORATION															
45/14w-11f015	4	112.35	61.86	0	0	0	0	0	0	0	0	0	0		174.21
45/14w-11g045	5	0	41.24	79.79	89.35	104.90	113.43	107.18	83.60	85.48	88.53	52.65	72.58		918.73
TOTALS		112.35	103.10	79.79	89.35	104.90	113.43	107.18	83.60	85.48	88.53	52.65	72.58		1092.94
WATSON LAND COMPANY															
45/14w-15c015	HATE	2.16	3.72	.02	0	0	6.35	3.46	.98	6.19	11.45	13.47	5.37		53.17
ZIEGLER, MAXWELL T															
35/13w-31m015	H13N	2.44	1.34	.27	.23	.33	1.32	2.64	3.01	3.14	4.03	4.68	3.15		26.78
GRAND TOTALS		4974.21	3860.97	4082.13	4703.85	3846.65	4945.29	4736.10	5365.48	5462.03	6665.67	6665.76	5560.79		60923.93

* ESTIMATED PRODUCTION

THIS BOOK IS DUE ON THE LAST DATE
STAMPED BELOW

BOOKS REQUESTED BY ANOTHER BORROWER
ARE SUBJECT TO RECALL AFTER ONE WEEK.
RENEWED BOOKS ARE SUBJECT TO
IMMEDIATE RECALL

SEP 26 1985

JAN 06 1986

DEC 1 1985

NOV 1 1985

NOV 2 1985

LIBRARY, UNIVERSITY OF CALIFORNIA, DAVIS

Book Slip-Series 458



TC California. Dept. of Water Resources.
824 Bulletin.

C2

A2

no. 179: 71-75

PHYSICAL
SCIENCES
LIBRARY

